z/OS

IBM

Infoprint Server Messages and Diagnosis

z/OS

Infoprint Server Messages and Diagnosis

> **Note**
>
> Before using this information and the product it supports, be sure to read the general information in "Notices" on page 225.

Fourth Edition (April 2002)

This edition is a major revision of G544-5747-02. It applies to z/OS Version 1 Release 2, Program Number 5694-A01; to z/OS.e Version 1 Release 3, Program Number 5655-G52; to Infoprint Server Transforms Version 1 Release 1 Modification Level 1, Program Number 5697-F51; and to all subsequent releases and modifications until otherwise indicated in new editions or technical newsletters. Be sure to use the correct edition for the level of the product.

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Contents

Figures

Tables

Summary of Changes

Summary of Changes
for G544–5747-03
z/OS™ Version 1 Release 2

The book contains information previously presented in G544-5747-02, which supports z/OS Version 1 Release 2.

New Information
- The following messages have been added:

AOP107E	AOPS009E	AOPS020E	AOPS030S	AOPS211I
AOP108E	AOPS010E	AOPS021E	AOPS101E	AOPS212S
AOP109E	AOPS011E	AOPS022E	AOP111E	AOPS301E
AOP110E	AOPS012E	AOPS023E	AOPS203S	AOPS401E
AOPS002I	AOPS013S	AOPS024E	AOPS204E	AOPS501E
AOPS004S	AOPS014E	AOPS025S	AOPS205E	AOPS701E
AOPS005I	AOPS015S	AOPS026E	AOPS206E	AOPS702S
AOPS006E	AOPS016E	AOPS027S	AOPS207E	AOPS999T
AOPS007E	AOPS017S	AOPS028E	AOPS208E	AOX0102W
AOPS008E	AOPS019E	AOPS029S	AOPS209E	

- "Print Interface System Completion Code and Reason Codes" on page 91 describes new Print Interface abend reason codes.

Changed Information
- System abend code X'09B' now can be issued for abends that occur in the Print Interface component of Infoprint Server.
- The system programmer response for IP PrintWay abend code E91 provides more information.
- The explanation and user response for message AOP001E provide more information.
- The explanation and system response for messages API950E and API954I provide more information.
- The data set name has been added to the text of the following IP PrintWay messages:
  - ANFM1103I
  - ANFM1104I
  - ANFM1105I
  - ANFM1106I
  - ANFM1107I

This book contains terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Summary of Changes
for G544–5747-02
z/OS Version 1 Release 2

The book contains information previously presented in G544-5747-01, which supports z/OS Version 1 Release 2.

New Information

• The following messages have been added:

ANFM170I	AOP102E	AOP108E	API0903E	API0956E
ANFM171I	AOP103E	AOP2202E	API0904E	API0957E
ANFM701I	AOP104E	AOP2203E	API0905E	API0958E
ANFM702I	AOP105E	API0900E	API0906E	API0959E
ANFM703I	AOP106E	API0901E	API0907E	API0960E
ANFM704I	AOP107E	API0902E	API0908E	API0961E

• The following IP PrintWay abend reason codes have been added:
  – X'0600'
  – X'0601'
  – X'0602'
  – X'0603'
  – X'0604'
• User abend code X'0023' has been added. This code is issued by the AFP to PCL, AFP to PostScript, and AFP to PDF transforms.
• Information about error message CSV003I REQUESTED MODULE AOXVTM NOT FOUND has been added to "Troubleshooting Infoprint Server" on page 167.
• "Preparing APARs" on page 180 states how to handle confidential information submitted to IBM with an APAR.
• "Diagnosing Problems with the E-mail Protocol" on page 196 describes how to diagnose problems with the IP PrintWay e-mail function.
• "Tracing Infoprint Server" on page 213 describes how to use the z/OS UNIX® **unset** command to turn tracing off.
• A new appendix describes the accessibility features of Infoprint® Server.

Changed Information
• The text of the following messages has changed:
  – ANFM1654I: This message displays the VTAM® RPL return code.
  – ANFM1656I: This message now also displays the VTAM return code.
  – AOP0003E: The number of the embedded system error message is optional. It is included when available.
• The explanations for messages API0807E and ANFM161I have been improved.

Deleted Information

The glossary has been removed and is now located in *z/OS Infoprint Server Customization*.

This book contains terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

**Summary of Changes
for G544–5747-01
z/OS Version 1 Release 2**

The book contains information previously presented in G544-5747-00, which supports z/OS Version 1 Release 1.

New Information

- The following messages have been added:

ANFM1120I	AOX1316I	AOX1501I	AOX1589I	AOX1733I
ANFM1121I	AOX1317I	AOX1502II	AOX1590I	AOX1734I
ANFM1208I	AOX1318I	AOX1504	AOX1595I	AOX1735I
ANFM1650I	AOX1319I	AOX1505I	AOX1596I	AOX1738I
ANFM1651I	AOX1320I	AOX1514I	AOX1597I	AOX1743I
ANFM1652I	AOX1321I	AOX1515I	AOX1598I	AOX1745I
ANFM1653I	AOX1322I	AOX1519I	AOX1599I	AOX1748I
AOP2018E	AOX1323I	AOX1520I	AOX1600I	AOX1755I
AOX0082I	AOX1324I	AOX1521I	AOX1602I	AOX1774I
AOX0083I	AOX1325I	AOX1522I	AOX1604I	AOX1776I
AOX0084I	AOX1326I	AOX1523I	AOX1606I	AOX1777I
AOX0085I	AOX1327I	AOX1525I	AOX1611I	AOX1778I
AOX0086I	AOX1328I	AOX1529I	AOX1615I	AOX1780I
AOX0087I	AOX1329I	AOX1530I	AOX1663I	AOX1781I
AOX0088I	AOX1330I	AOX1531I	AOX1664W	AOX1782I
AOX0089I	AOX1333I	AOX1540W	AOX1665I	AOX1785I
AOX0090I	AOX1334I	AOX1545I	AOX1670I	AOX1789I
AOX0091I	AOX1335I	AOX1552I	AOX1671I	AOX1790I
AOX0092W	AOX1336I	AOX1553I	AOX1678I	AOX1791I
AOX0093I	AOX1337I	AOX1554I	AOX1681I	AOX1792I
AOX0585I	AOX1338W	AOX1555I	AOX1686I	AOX1794I
AOX1003I	AOX1339I	AOX1556I	AOX1689I	AOX1795I
AOX1059I	AOX1370I	AOX1557I	AOX1690W	AOX1796I
AOX1064I	AOX1371I	AOX1558I	AOX1691I	AOX1797W
AOX1066I	AOX1372I	AOX1559I	AOX1692I	AOX1798W
AOX1067I	AOX1373I	AOX1560I	AOX1693I	AOX1808I
AOX1070I	AOX1374I	AOX1561I	AOX1694I	AOX1810I
AOX1103I	AOX1375I	AOX1562I	AOX1695I	AOX1811I
AOX1104I	AOX1376I	AOX1563I	AOX1696I	AOX1812I
AOX1105I	AOX1378I	AOX1564I	AOX1697I	AOX1813I
AOX1106I	AOX1379I	AOX1565I	AOX1698I	AOX1814I
AOX1111I	AOX1380I	AOX1577I	AOX1699I	AOX1815I
AOX1112I	AOX1381I	AOX1578I	AOX1701I	AOX1816I
AOX1116I	AOX1382I	AOX1579I	AOX1703I	AOX1825I
AOX1118I	AOX1383I	AOX1580I	AOX1704I	AOX1901I
AOX1120I	AOX1384I	AOX1581I	AOX1715I	AOX1902I
AOX1128I	AOX1392I	AOX1582I	AOX1716I	AOX1903I
AOX1310I	AOX1394I	AOX1583I	AOX1717I	AOX1904I
AOX1311I	AOX1395I	AOX1584I	AOX1719I	AOX1916W
AOX1312I	AOX1397I	AOX1585I	AOX1722I	AOX1917W
AOX1313I	AOX1398I	AOX1586I	AOX1725I	AOX1918W
AOX1314I	AOX1399I	AOX1587I	AOX1730I	
AOX1315I	AOX1500I	AOX1588I	AOX1731I	

- The following NetSpool™ abend reason codes have been added:

X'0516'	X'0519'	X'0522'	X'0524'	X'0526'
X'0517'	X'0520'	X'0523'	X'0525'	X'0527'
X'0518'	X'0521'			

- The following NetSpool sense codes have been added:
  - X'081C0305'
  - X'081C0306'
- "Tracing Infoprint Server" on page 213 contains information about changes to the Infoprint Server tracing procedure:

– If you want to change the default directory for Infoprint Server trace files, you now must specify the AOPTRACEDIR environment variable in the **aopstart** EXEC.

– You can now specify the AOPTRACEON environment variable in the new AOPSTART JCL procedure.

Changed Information

• The following messages have been changed:

AOX0925I	AOX1610I	AOX1728W	AOX1803I	AOX1923I
AOX1086W	AOX1705W	AOX1772W	AOX1920W	AOX1925I
AOX1109W	AOX1711I	AOX1773W	AOX1921I	AOX1998W
AOX1608I	AOX1727W	AOX1784I	AOX1922I	

Deleted Information

• The appendices that show how NetSpool supports SCS and 3270 code points have been removed. You can find them now only in *z/OS Infoprint Server User's Guide*.

• The introduction chapter has been removed. Refer to one of the following publications for introductory information about Infoprint Server:

– For a general introduction to Infoprint Server, refer to *z/OS Infoprint Server Introduction*.

– For a more technical introduction to all Infoprint Server components, refer to the introduction in *z/OS Infoprint Server Customization*.

• In addition to the deleted messages listed in *z/OS Summary of Message Changes*, the following messages have been deleted:

AOX0136W	AOX1710W	AOX1746W	AOX1751W	AOX1924I

This book contains terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

About This Publication

This publication helps you troubleshoot difficulties with the following products:

- Infoprint Server, an element of z/OS Version 1 Release 2 (5694–A01), and higher; and z/OS.e™ Version 1 Release 3 (5655-G52), and higher
- Infoprint Server Transforms Version 1 Release 1, a separate IBM® licensed product (5697-F51)

This publication helps you use the messages and codes issued by Infoprint Server and Infoprint Server Transforms. It also helps you perform diagnostic procedures to isolate problems and work with IBM Support Center service representatives.

This book is intended to help you with problem determination and recovery procedures. This publication does not give enough information to change or correct program logic.

The information in this publication is provided by IBM for diagnostic purposes and is subject to change as a result of maintenance and other activity.

This publication assumes that you are familiar with TCP/IP, JES, and z/OS job control language (JCL).

Note for System Automators: Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes. For details on message changes, refer to *z/OS Summary of Message Changes*. Also, see "Summary of Changes" on page xi for additional new and changed messages.

Who Should Use This Publication

The list of messages and codes can be used by anyone who knows how to maintain and operate Infoprint Server or its components or the printers that work with Infoprint Server.

Use the diagnostic information in this publication if you are a system programmer, a system analyst, or an application programmer responsible for diagnosing problems in Infoprint Server.

How This Publication is Organized

This book is divided into two main parts.

Part 1, "Messages and Codes" on page 1 lists the messages and codes issued by Infoprint Server, describes what the system does after an error occurs, and suggests what you should do to correct the problem. The chapters list messages and codes for different components of Infoprint Server. They are ordered alphanumerically by message number.

- Chapter 1, "IP PrintWay Messages and Codes" on page 3 describes the messages, the system completion codes, and abend reason codes issued by IP PrintWay™.
- Chapter 2, "Infoprint Server Messages and Codes" on page 61 describes the messages issued by Infoprint Server and includes messages issued by the

components IP PrintWay, NetSpool, Print Interface, Printer Inventory Manager, and the SNMP subagent. It also describes Print Interface abend reason codes.
- Chapter 4, "NetSpool Messages and Codes" on page 135 describes the messages, sense codes, and system abend code issued by NetSpool.
- Chapter 5, "Printer Inventory Manager Return Codes and Reason Codes" on page 157 describes the return codes and reason codes issued by the Printer Inventory Manager to other Infoprint Server components.

Part 2, "Diagnosis" on page 159 describes the diagnostic tools available for troubleshooting Infoprint Server.
- Chapter 6, "Understanding the Infoprint Server Diagnostic Process" on page 163 describes how to determine with which Infoprint Server component diagnostic tools to work and offers some troubleshooting tips.
- Chapter 7, "Building a Keyword String" on page 171 describes how to build a keyword string to help you communicate with the IBM Support Center.
- Chapter 8, "Using IP PrintWay Diagnostic Tools" on page 183 describes the diagnostic tools for use with the IP PrintWay component of Infoprint Server.
- Chapter 9, "Using NetSpool Diagnostic Tools" on page 199 describes the diagnostic tools for use with the NetSpool component of Infoprint Server.
- Chapter 10, "Using Printer Inventory Manager Diagnostic Tools" on page 207 describes the diagnostic tools for use with the Printer Inventory and the Printer Inventory Manager ISPF panels.
- Chapter 12, "Using General Infoprint Server Diagnostic Tools" on page 213 describes the diagnostic tools for use with Infoprint Server.
- Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221 explains how to start the generalized trace facility, which is used with NetSpool and IP PrintWay external tracing.

This publication also contains a bibliography.

Where to Find More Information

This section describes where to find information related to z/OS, Infoprint Server, and Infoprint Server Transforms.

Web Sites

These Web sites contain related information:
- http://www.ibm.com/printers/

  This site contains information about printing products, including:
  - An overview of Infoprint Server, including the same printing scenarios that you can find in *z/OS Infoprint Server Introduction*.
  - Infoprint Server publications and other publications related to printing. These publications are in PDF format.
- http://www.ibm.com/printers/download.html

  This site contains downloads for Windows systems, including the Infoprint Port Monitor, the AFP Viewer plug-in, the AFP Printer Driver, and Network Printer Manager (NPM) for the Web.
- http://www.ibm.com/servers/eserver/zseries/zos/

  This site contains information about z/OS.
- http://www.ibm.com/servers/eserver/zseries/zos/bkserv/

  This site contains z/OS documentation, including:
  - All z/OS publications in both PDF and BookManager format.

| – Documentation updates that result from APARs and PTFs.
| • http://ibm.com/redbooks
| This site contains IBM redbooks, including a redbook for Infoprint Server.
• http://www.ibm.com/servers/eserver/zseries/zos/unix/

This site contains information about z/OS UNIX System Services.

Accessing Licensed Books on the Web

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5. Click on **z/OS**.
6. Access the licensed book by selecting the appropriate element.

Using LookAt to look up message explanations

LookAt is an online facility that allows you to look up explanations for most of the z/OS, z/VM, and VSE messages you encounter, as well as system abends and some codes. Using LookAt to find information is faster than a conventional search because in most cases LookAt goes directly to the message explanation.

You can access LookAt from the Internet at:

`http://www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/`

or from anywhere in z/OS where you can access a TSO command line (for example, TSO prompt, ISPF, z/OS UNIX System Services running OMVS). You can also download code from the *z/OS Collection* (SK3T-4269) and the LookAt Web site so you can access LookAt from a PalmPilot (Palm VIIx suggested).

To use LookAt on the Internet to find a message explanation, go to the LookAt Web site and simply enter the message identifier (for example, `$HASP701` or `$HASP*`). You can select a specific release to narrow your search.

To use LookAt as a TSO command, you must have LookAt installed on your host system. You can obtain the LookAt code for TSO from a disk on your *z/OS Collection* (SK3T-4269) or from the LookAt Web site. To obtain the code from the LookAt Web site, do the following:

1. Go to http://www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/.
2. Click **News**.
3. Scroll to **Download LookAt Code for TSO and z/VM.**
4. Click the ftp link, which will take you to a list of operating systems. Click the appropriate operating system. Then click the appropriate release.
5. Open the **lookat.me** file and follow its detailed instructions.

After you have LookAt installed, you can access a message explanation from a TSO command line by entering: **lookat** *message-id*. LookAt will display the message explanation for the message requested.

Note: Some messages have information in more than one book. For example, IEC192I can be found in *z/OS MVS System Messages, Vol 7 (IEB-IEE)* and also in *z/OS MVS Routing and Descriptor Codes*. For such messages, LookAt displays a list of books in which the message appears. You can then select one of the books to view the message explanation.

Preventive Service Planning Information

Before installing Infoprint Server, you should review the current Preventive Service Planning (PSP) information, also called the PSP bucket. You should also periodically review the current PSP information. The PSP upgrade ID is: ZOSV1R2; the subset for Infoprint Server is: INFOPRINT.

To obtain the current PSP bucket, contact the IBM Support Center or use z/OS SoftwareXcel (IBMLink). If you obtained z/OS as part of a CBPDO, HOLDDATA and PSP information is included on the CBPDO tape; however, this information might not be current if the CBPDO tape was shipped several weeks prior to installation.

Publications

See "Bibliography" on page 227 for a list of the publications referred to in this book and publications that contain additional information about related products. For titles and order numbers of the books for *all* products that are part of z/OS, refer to *z/OS Information Roadmap*.

Infoprint Server for z/OS Implementation Redbook, SG24-6234, is available on the Web at: `http://ibm.com/redbooks`

Table 1 on page xix summarizes the publications in the Infoprint Server product library.

Table 1. Summary of Infoprint Server Publications

Publication	Form number
z/OS Infoprint Server Introduction	S544-5742
Introduces all components of Infoprint Server, including IP PrintWay, NetSpool, and Print Interface. It also introduces Infoprint Server Transforms. This publication contains printing scenarios that show how you can use Infoprint Server in your installation.	
z/OS Infoprint Server Migration	G544-5743
Summarizes the new function in Infoprint Server and Infoprint Server Transforms and describes the migration tasks required to implement each new function in your installation. It also describes the Infoprint Server migration program, which converts IP PrintWay, NetSpool, and Print Interface printer information to the format required by Infoprint Server for OS/390® V2R8 and higher.	
z/OS Infoprint Server Customization	S544-5744
Describes customization tasks for all components of Infoprint Server, including IP PrintWay, NetSpool, and Print Interface. It also describes customization tasks for Infoprint Server Transforms. This publication describes required environment variables, configuration files, startup procedures, how to write exit routines and filter programs, and how to use the Infoprint Server API.	
z/OS Infoprint Server Operation and Administration	S544-5745
Describes operator procedures and administrative tasks for all components of Infoprint Server, including IP PrintWay, NetSpool, and Print Interface. This publication describes how to start and stop Infoprint Server and how the operator can manage the IP PrintWay transmission queue. It describes how the administrator can create entries in the Printer Inventory using either ISPF panels or the Printer Inventory Definition Utility (PIDU) program, define NetSpool printer LUs to VTAM, and use accounting records written by IP PrintWay.	
z/OS Infoprint Server User's Guide	S544-5746
Describes how to submit print jobs from remote systems (including Windows® systems), the local z/OS system, and Virtual Telecommunications Access Method (VTAM) applications. It describes these z/OS UNIX commands: **afp2pcl**, **afp2pdf**, **afp2ps**, **cancel**, **lp**, **lpstat**, **pcl2afp**, **pdf2afp**, **ps2afp**, and **sap2afp**; the AOPPRINT JCL procedure; the AOPBATCH program; DD and OUTPUT JCL parameters supported by Infoprint Server; and how to download and install the Infoprint Port Monitor for Windows.	
z/OS Infoprint Server Messages and Diagnosis	G544-5747
Describes messages issued by all components of Infoprint Server, including IP PrintWay, NetSpool, and Print Interface. It also describes Infoprint Server Transforms messages and how to use Infoprint Server tracing facilities to diagnose and report errors.	

Message Explanations

Part 1 list the messages for each component of Infoprint Server in ascending alphanumeric order. The message entries in this section provide:

Explanation

The explanation gives more information on the condition that Infoprint Server to issue the message

System Action

The system action describes how the system responds to the condition.

User Response, System Programmer Response, and Operator Response

The user response, system programmer response, and operator response provide actions for recovering from the error condition. Often this part of the entry gives more than one recovery action, or a series of related recovery actions; this means that more than one problem may have caused the error.

Note: Infoprint Server often issues more than one message for an error condition. When this occurs, use all the messages to define and correct the error.

Some message descriptions refer you to other publications for hardware and software for more information. "Bibliography" on page 227 contains a listing of applicable printer, communications, and operating system publications.

Chapter 1, "IP PrintWay Messages and Codes" and Chapter 4, "NetSpool Messages and Codes" also list the abend reason codes for the IP PrintWay and NetSpool components of Infoprint Server. The code entries provide:

Explanation

The explanation gives more information about the condition that caused the component to abend.

System Action

The system action specifies whether the component is to attempt to restart automatically or is to continue to terminate.

System Programmer Response

If present, the system programmer response provides a suggested action for recovering from the error condition.

Message Destinations

Infoprint Server components issue messages to one or more of the following destinations, depending on which is most appropriate:

Operator's console

Messages that the operator or system programmer must address.

Security administrator's console

Messages reporting security violations or errors in the processing of security functions.

Job submitter's console

Messages reporting the completion or failure of a job to print.

Message log data set

Messages issued are also recorded on the message log data sets defined during initial setup. For more information, refer to *z/OS Infoprint Server Customization*.

Transform daemon message log

Messages from the transform daemons can be found in message logs created each session for each daemon. The message log file is located in the **xfd** subdirectory under the base directory defined in aopd.conf (usually /var/Printsrv/). The filename is *daemon.n*.stderr, where:

daemon   is the name of the transform daemon with the error; for example, `pc12afp`.

n   is the instance of the transform daemon.

The message log data sets clear every time the transform manager is restarted.

Code Types

Infoprint Server messages contain information on these types of codes:
- Action codes
- Dynamic allocation error codes
- Event Control Block (ECB) completion codes
- Information codes
- Status codes
- Return reason codes
- Abend reason codes
- System completion codes
- SNA sense codes
- VTAM codes

In determining a recovery procedure, use these codes in addition to the information in this publication. The code explanations in this publication either tell you how to interpret these codes, or refer you to another publication that contains the information you need.

Understanding Syntax Notation

The following rules apply to coding illustrations throughout this publication:
- Uppercase or bold letters are to be coded as shown.
- Variable data is printed in italics. Enter specific data to replace the characters in italics.
- Do not enter the following symbols as part of a parameter or option:

Vertical Bar |
Underscore   ___
Brackets   [ ]
Braces   { }

- A vertical bar between two values means that you select one of the values.
- An underscored value means that if an option is not specified, the underscored value, called the default, is used.
- Brackets around a value mean that you do not have to select the value.
- Braces around a value mean that you must select one of the values.

Part 1. Messages and Codes

Chapter 1. IP PrintWay Messages and Codes

This chapter describes the messages, system completion codes, and abend reason codes issued by the IP PrintWay™ component of Infoprint Server.

Note: Messages issued by Infoprint Server ISPF panels are not described in this chapter. Use the ISPF help function for more information about these messages.

Message Format

The messages have a message identifier followed by the message text, as shown below:

ANFM*nnnnt*

ANFM	Identifies IP PrintWay messages
nnnn	Three to four-digit message number
t	One-character type code:

Type code	Meaning
A	Operator action is required.
E	An error occurred.
I	This is an information message.
W	A warning situation occurred.

Messages

ANFMI000 - ANFMI999

Explanation: These messages are issued by Infoprint Server for ISPF panel modules. For an explanation, see the help provided on the ISPF panel.

ANFM004I   Using message table *msgtabl*

Explanation: In the message text, *msgtabl* is the name of the message table that was loaded by the messaging facility.

System Action: IP PrintWay initialization continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM005S   Failed to load message table *msgtabl*

Explanation: IP PrintWay could not load the message table into storage. Either the table was not found in the STEPLIB/LINKLIST concatenation, or insufficient virtual storage was available to load the table.

In the message text, *msgtabl* is the name of the message table that failed to load.

System Action: Message processing is not available. IP PrintWay is terminated.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Verify that IP PrintWay was installed correctly and that the message table is stored in a library in the search list of the load module library (STEPLIB/LINKLIST).

Source: Infoprint Server

ANFM006S   Unable to create message table token *tokennm*

Explanation: IP PrintWay could not create the named token that contains the message table anchor.

In the message text, *tokennm* is the message token name that could not be created.

System Action: Message processing is not available. IP PrintWay is terminated.

Operator Response: No response is necessary.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM007I   Unable to retrieve message table token
**   *tokennm***

Explanation: IP PrintWay could not retrieve the
named token that contains the message table anchor.

In the message text, *tokennm* is the message token
name that could not be retrieved.

System Action: Termination continues.

Operator Response: No response is necessary.

System Programmer Response: If the error condition
persists, contact your service representative in the IBM
Support Center, or use your electronic link with IBM
service for assistance.

Source: Infoprint Server

ANFM008I   Unable to delete message table from
**   storage *msgtabl***

Explanation: IP PrintWay could not delete the
message table from storage during termination.

In the message text, *msgtabl* is the message table
name that could not be deleted.

System Action: Termination continues.

Operator Response: No response is necessary.

System Programmer Response: Contact your
service representative in the IBM Support Center, or use
your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM009I   Unable to delete message table token
**   *tokennm***

Explanation: IP PrintWay could not delete the named
token that contains the message table anchor.

In the message text, *tokennm* is the message token
name that could not be deleted.

System Action: Termination continues.

Operator Response: No response is necessary.

System Programmer Response: If the error condition
persists, contact your service representative in the IBM
Support Center, or use your electronic link with IBM
service for assistance.

Source: Infoprint Server

ANFM010S   Unable to delete message table token
**   *fctcode***

Explanation: Unknown function code sent to message
initialization routine. This is an internal error.

In the message text, *fctcode* is the unknown ANFMINIT
function code.

System Action: The task is terminated.

Operator Response: Notify your system programmer
of this error.

System Programmer Response: Contact your
service representative in the IBM Support Center, or use
your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM011S   Unable to retrieve message table token
**   *tokennm***

Explanation: IP PrintWay could not retrieve the
named token that contains the message table anchor.

In the message text, *tokennm* is the message token
name that could not be retrieved.

System Action: IP PrintWay ends.

Operator Response: No response is necessary.

System Programmer Response: If the error condition
persists, contact your service representative in the IBM
Support Center, or use your electronic link with IBM
service for assistance.

Source: Infoprint Server

ANFM012S   Unable to obtain *stgsize* bytes of
**   storage for message DCB**

Explanation: IP PrintWay could not obtain storage
below 16 M for the message file DCB.

In the message text, *stgsize* is the amount of storage
requested.

System Action: PrintWay ends.

Operator Response: Notify your system programmer
of this error.

System Programmer Response: Contact your
service representative in the IBM Support Center, or use
your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM020A   *jobname* Enter the IP PrintWay trace
**   command or U – using the MVS**
**   MODIFY command**

Explanation: The PARM parameter in the startup
procedure specifies the PROMPT for the operator
interface. The IP PrintWay has not been initialized. See
Operator Response.

In the message text, *jobname* is a job name, an FSS
name, or an FSA name.

System Action: IP PrintWay initialization continues.

Operator Response: You can do one of the following:

1. Enter MODIFY commands for the FSS and then initialize the IP PrintWay operator interface by responding U. Do not specify an FSA name of the MODIFY command:

   {MODIFY | F} *fssname*,*command*

2. Continue initializing of the IP PrintWay operator interface:

   {MODIFY | F} *fssname*,U

fssname is the name of the IP PrintWay FSS as provided in the message. Do not enter an FSA name, or the command will be rejected. After the IP PrintWay operator interface is initialized, you can enter any IP PrintWay operator commands.

For more information about the format of the MODIFY command, see Chapter 8, "Using IP PrintWay Diagnostic Tools" on page 183.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM021I *jobname* **The IP PrintWay operator interface has been initialized**

Explanation: The IP PrintWay operator interface has been initialized successfully. All IP PrintWay commands can now be entered.

In the message text, *jobname* is the job name, an FSS name, or an FSA name.

System Action: IP PrintWay initialization continues.

Operator Response: You can now type IP PrintWay commands.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM022I *jobname* **Not enough storage is available to initialize the IP PrintWay operator interface - storage requested (*storagesize*), return code = (*retcode*)**

Explanation: Not enough storage is available for control blocks or work areas. The message indicates the size of the storage being requested. The return code is from the MVS GETMAIN macro.

In the message text, *jobname* is the job name, an FSS name, or an FSA name. *storagesize* is the storage size requested by the GETMAIN macro. *retcode* is the GETMAIN macro return code from the unsuccessful GETMAIN request.

System Action: The IP PrintWay operator interface is not initialized. IP PrintWay initialization continues.

Operator Response: No response is necessary.

System Programmer Response: The size of the REGION parameter should be increased. Increase the REGION parameter used in the IP PrintWay startup procedure.

Source: Infoprint Server

ANFM023I *jobname* **The IP PrintWay operator interface initialization was unsuccessful - module(*modulename*)**

Explanation: The IP PrintWay operator interface was not initialized successfully. A functional command initialization module returned a nonzero return code.

In the message text, *jobname* is either a job name, an FSS name, or an FSA name. *modulename* is a functional command initialization module that returned a nonzero return code.

System Action: The IP PrintWay operator interface is not initialized. IP PrintWay initialization continues.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: See the specific error conditions described in the accompanying messages to determine an appropriate response.

Source: Infoprint Server

ANFM024I *jobname* **The IP PrintWay operator interface is being terminated, module(*modulename*) has terminated**

Explanation: An abend has occurred in a module that has had a previous abend condition. Because the previous abend and this abend involve the same module, IP PrintWay does not attempt a recovery of the operator interface.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *modulename* is a previous module that had abended and has abended again.

System Action: The IP PrintWay operator interface is terminated.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: If you suspect an IP PrintWay programming error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM025I *jobname* **The IP PrintWay operator interface has been terminated**

Explanation: The IP PrintWay operator interface has had an unrecoverable error and has been terminated.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.

System Action: The IP PrintWay operator interface is terminated.

Operator Response: To activate the operator interface, purge and restart IP PrintWay.

System Programmer Response: If you suspect an IP PrintWay programming error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM027I   *jobname* **The FORCE command terminated the IP PrintWay FSA** *fsaname*

Explanation: The operator has issued an MVS MODIFY FORCE command for the specified IP PrintWay FSA.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *fsaname* is the name of FSA that has been terminated.

System Action: The Functional Subsystem Application (FSA) for the indicated FSA name has been terminated.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM028I   *jobname* **(***modulename***) detected system completion code '***systemcompletioncode***', IP PrintWay abend reason code '***abendreasoncode***'**

Explanation: The operator has issued an MVS MODIFY FORCE command for the specified FSA name.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *modulename* is the name of ESTAI routine that is processing the error. *systemcompletioncode* is the system completion code. *abendreasoncode* is the abend reason code.

System Action: The Functional Subsystem Application (FSA) for the indicated FSA name has been terminated.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM029I   *jobname* **IP PrintWay operator interface was terminated abnormally**

Explanation: IP PrintWay detected an unrecoverable error while evaluating the abend condition. The ESTAI routine should have provided an SVC dump.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.

System Action: Abend processing continues.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: Print the SVC dump provided by the ESTAI routine.

Source: Infoprint Server

ANFM030I   *jobname* **IP PrintWay ESTAI cannot evaluate system completion code '***systemcompletioncode***', abnormal termination continues**

Explanation: The IP PrintWay ESTAI routine is unable to continue because IP PrintWay did not issue the system completion code.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *systemcompletioncode* is the system completion code.

System Action: Abend processing continues.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Print the SVC dump provided by the ESTAI routine. Refer to *z/OS MVS System Codes* for more information.

Source: Infoprint Server

ANFM031I   *jobname* **The IP PrintWay command(***command***) was not processed, tracing is not active**

Explanation: The command was not processed because tracing was not active.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay continues processing.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM032I   *jobname* **The IP PrintWay command(***command***) was not processed, FSA(***fsaname***) is not active**

Explanation: The FSA name specified in a command was not active.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command. *fsaname* is the IP PrintWay FSA name.

System Action: IP PrintWay continues processing.

Operator Response: Type the command again after starting the named FSA.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM035I   *jobname* **Command(***command***) is not valid for IP PrintWay**

Explanation: An unsupported command was typed as a parameter of the MODIFY command. The command is not supported.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command.

Operator Response: Type a valid command.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM036I   *jobname* **An unsupported keyword(***keyword***) was specified for command(***command***)**

Explanation: You entered an invalid keyword with the MODIFY command. The keyword is not supported.

In the message text, *jobname* is a job name, an FSS name, or an FSA name *keyword* is the IP PrintWay keyword. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command.

Operator Response: Type the command using a valid keyword.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM037I   *jobname* **Processing of the FORCE command for IP PrintWay FSA *fsaname* has been terminated because the FSA has already begun terminating**

Explanation: The operator has issued an IP PrintWay FORCE command with the MVS MODIFY command for a FSA that is already in the process of terminating.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *fsaname* is the IP PrintWay FSA Name.

System Action: The IP PrintWay MODIFY FORCE command for the indicated FSA has been discarded by IP PrintWay. The termination processing already in progress will complete to attain the results desired by the discarded MODIFY FORCE command.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM038I   *jobname* **No IP PrintWay command was specified—***data*

Explanation: The operator entered data that is not a command. The last character of data was the last position checked before it was decided a correct command was not present.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *data* are alphanumeric characters.

System Action: IP PrintWay ignores the data and processes the next command entered.

Operator Response: Type a valid IP PrintWay command.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM039I   *jobname* **The status of the IP PrintWay command(***command***) is *status***

Explanation: The IP PrintWay command has been accepted or the command has been queued for later processing. When the command is accepted, the functional processor is called to process the command. When the command is queued, the command is placed on either an FSS-level queue or an FSA-level queue. All commands that are queued in which the FSA name was specified are queued on the FSA-level queue. Commands issued without the FSA name are queued on the FSS-level queue.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command. *status* is the status of the command—for

example, accepted or queued.

System Action: IP PrintWay continues processing the data.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM046I *jobname* **The keyword(***keyword***) is mutually exclusive with another keyword specified in the IP PrintWay command(***command***)**

Explanation: You entered two mutually exclusive keywords in this command.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *keyword* is the IP PrintWay keyword. *command* is the IP PrintWay command.

System Action: The command is ignored, and processing continues with the next command entered.

Operator Response: Type the command again specifying the correct keywords.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM047I *jobname* **The IP PrintWay Keyword** *keyword* **cannot be specified with** *keywordparameter***, keyword ignored**

Explanation: You entered a keyword that is mutually exclusive with another keyword or parameter in the command.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *keyword* is the IP PrintWay keyword. *keywordparameter* is the IP PrintWay keyword parameter.

System Action: The keyword is ignored and defaults are used.

Operator Response: Type the command again if different keywords are required. For more information about the keywords, refer to *z/OS Infoprint Server Operation and Administration*.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM048I *jobname* **A duplicate keyword (***keyword***) was entered for the IP PrintWay command (***command***)**

Explanation: You entered the same keyword more than once in the same command.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *keyword* is the IP PrintWay keyword. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the correct format of the command.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM049I *jobname* **An IP PrintWay keyword was expected but was not found -** *commandtext*

Explanation: The operator entered *commandtext* instead of a valid keyword. The last character of *commandtext* is the last position checked before determining that the keyword was invalid.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandtext* is the text of the command entered.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the correct format of the command.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM050I *jobname* **Keywords are not allowed with the IP PrintWay command(***command***)**

Explanation: You typed a command with keywords, but this command does not allow keywords.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again without the keywords.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM051I *jobname* **A keyword is required for the IP PrintWay command(***command***)**

Explanation: You entered a command without keywords, but this command requires keywords.

In the message text, *jobname* is a job name, an FSS

name, or an FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again with the required keywords.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM061I   *jobname* **An unsupported parameter(***parameter***) was specified for keyword(***keyword***) in the IP PrintWay command(***command***)**

Explanation: You typed an invalid keyword parameter.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *parameter* is the IP PrintWay keyword parameter. *keyword* is the IP PrintWay keyword.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again with the correct parameter for the keyword.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM064I   *jobname* **The parameter(***parameter***) is mutually exclusive with another parameter specified in keyword(***keyword***) in the IP PrintWay command(***command***)**

Explanation: You typed two mutually exclusive parameters in the indicated keyword.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *parameter* is the IP PrintWay keyword parameter. *keyword* is the IP PrintWay keyword. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again with consistent keywords specified.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM067I   *jobname* **A duplicate parameter(***parameter***) was entered for keyword(***keyword***) in the IP PrintWay command(***command***)**

Explanation: You typed a parameter more than once in the keyword.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *parameter* is the keyword parameter. *keyword* is the IP PrintWay keyword. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command without a duplicate parameter for the keyword.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM068I   *jobname* **A delimiter was found where an IP PrintWay parameter was expected -** *commandtext*

Explanation: A delimiter was found where a parameter was expected. The last character of the *commandtext* data is the invalid delimiter.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandtext* is the text of the command up to the error.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the correct format of the command.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM069I   *jobname* **No parameters were specified for keyword(***keyword***) in the IP PrintWay command(***command***)**

Explanation: You entered a keyword without its required parameters.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *keyword* is the IP PrintWay keyword. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again with the correct keyword parameters.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM070I *jobname* **An unbalanced parenthesis was encountered in the IP PrintWay command -** *commandtext*

Explanation: An ending parenthesis is missing from a command. *commandtext* is the data that was entered. The last character of *commandtext* was the last position checked before it was decided a correct parameter list was not present.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandtext* is the text of the command up to the error.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command and the keyword parameter list in the correct format.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM071I *jobname* **An IP PrintWay parameter was found where an FSA name was expected -** *commandparameter*

Explanation: You entered a command without the FSA name. The command was entered as `command,parameter`, but you should have entered it as `command,prtnnnn,parameters` if you want to specify an FSA name. If you do not want to specify an FSA name, enter `command,,parameters`.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandparameter* are the command parameters up to the error.

System Action: IP PrintWay ignores the command and processes the next command.

Operator Response: Type the command again with a FSA name or with a comma to occupy the position of the FSA name.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM083I *jobname* **An FSA name cannot be specified for an IP PrintWay command during initialization.**

Explanation: The reply for message ANFM020A specified the FSA name in the command. During initialization the FSA name cannot be specified with any command. These commands take effect for the entire FSS. Thus, an FSA name specification is not valid.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.

System Action: IP PrintWay ignores the command

and processes the next command entered.

Operator Response: Type the command without the FSA name.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM084I *jobname* **The format of FSA name (***fsaname***) is not valid in IP PrintWay command (***command***)**

Explanation: The FSA name specified is not valid because its format is not valid. The format of an FSA name is prt(nnnnn).

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *fsaname* is the IP PrintWay FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the correct format of the FSA name.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM085I *jobname* **An FSA name cannot be specified for the IP PrintWay command(***command***)**

Explanation: You entered a command with an FSA name, but the FSA name parameter is not valid with this command.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again without an FSA name.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM086I *jobname* **An FSA name is required for the IP PrintWay command(***command***)**

Explanation: You entered a command without an FSA name, but an FSA name parameter is required with this command.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay command.

System Action: IP PrintWay ignores the command

and processes the next command entered.

Operator Response: Type the command again with an FSA name.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM087I *jobname* **An FSA name cannot be specified with the IP PrintWay command(***command***) with parameter(***parameter***)**

Explanation: The FSA name was specified for a command, but the parameter specified with this command does not allow the FSA name to be specified.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay Command. *parameter* is the IP PrintWay keyword parameter.

System Action: IP PrintWay ignores the command and processes the next command entered.

Operator Response: Type the command again without an FSA name.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM091I *jobname* **Not enough storage is available to process command queues - storage requested = ***storagerequested***, return code = (***retcode***)**

Explanation: Additional storage was required to process the command queues, but this storage was not available. The return code is from the GETMAIN macro.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *storagerequested* is the amount of storage requested. *retcode* is the return code from request.

System Action: IP PrintWay ignores the command and processes the next command.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: Increase the REGION parameter on the startup procedure.

Source: Infoprint Server

ANFM092I *jobname* **The IP PrintWay QEDIT request was unsuccessful - return code = (***retcode***)**

Explanation: An MVS QEDIT request to change the number of requests that could be queued for this FSS

was unsuccessful. The return code is the code returned by the QEDIT macro.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *retcode* is the return code from the request.

System Action: The operator interface is terminated with a dump.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: For information about the QEDIT return code, refer to *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU*.

Source: Infoprint Server

ANFM093I *jobname* **The MVS STOP command is not valid for the IP PrintWay operator interface**

Explanation: You entered an MVS STOP command for the IP PrintWay operator interface. The IP PrintWay operator interface processes only the MVS MODIFY command.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.

System Action: IP PrintWay ignores the command and processes the next command.

Operator Response: Use the MVS MODIFY command to enter IP PrintWay commands.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM094I *jobname* **The ***systemfunction*** call was unsuccessful for the IP PrintWay module ***modulename***, return code (***retcode***) - module(***modulename***)**

Explanation: A system function was used to perform some task for the operator interface. The function returned a non-zero return code.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *systemfunction* is a System Function used to perform some task for the operator interface. *modulename* is the System function request that was issued for this module. *retcode* is the return code returned by the system function.

System Action: Processing ends with an abend or error message. A subsequent IP PrintWay message notifies the operator what action was taken.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: For information

about the return code, refer to one of the following publications:

- *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN*
- *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG*
- *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU*
- *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO*

Source: Infoprint Server

ANFM095I   *jobname* **An IP PrintWay FREEMAIN invocation was unsuccessful for subpool(***subpool***), return code = (***retcode***) - module(***modulename***)**

Explanation: The FREEMAIN was unsuccessful. It returned a nonzero return code.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *subpool* is the Subpool being freed. *retcode* is the return code from the FREEMAIN macro. *modulename* is the name of module that issued the FREEMAIN macro.

System Action: Processing ends with an abend or error message. A subsequent IP PrintWay message notifies the operator what action was taken.

Operator Response: Inform your system programmer that this error occurred.

System Programmer Response: For information about the return code, refer to *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG*.

Source: Infoprint Server

ANFM100I   **An IP PrintWay SVC dump was unsuccessful - reason code(***reasoncode***)**

Explanation: The IP PrintWay ESTAI routine received a return code of X'08' from the system's SVC dump service. This indicates that the SVC dump was unsuccessful.

In the message text, *reasoncode* is the SVC dump's reason code.

System Action: Abend processing continues.

Operator Response: Notify your system programmer of this error.

System Programmer Response: If you receive reason code X'0B', Dump Analysis Elimination (DAE) has suppressed the dump due to a previous similar dump having occurred. Check the SYS1.DAE data set for a symptom string that matches the abend that just occurred. If you receive reason code X'05', verify that at least one SYS1.DUMPnn data set is available when IP PrintWay attempts to take a dump. To determine why

the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

Source: Infoprint Server

ANFM101I   **An IP PrintWay SVC dump was successful**

Explanation: IP PrintWay successfully completed an SVC dump to a SYS1.DUMPnn data set.

System Action: Abend processing continues.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Examine the SVC dump.

Source: Infoprint Server

ANFM102I   **System completion code** *complcode* **ABEND reason code** *rsncode* **has been detected by IP PrintWay module** *modulename*

Explanation: The IP PrintWay ESTAI routine detected an abend condition.

In the message text, *complcode* is the system completion code. *rsncode* is the abend reason code. The abend reason codes are described in "IP PrintWay System Completion Code and Abend Reason Codes" on page 42. *modulename* is the name of the ESTAI module.

System Action: Depending on the error condition, processing is terminated for the FSA for which the error occurred, or processing is terminated for the entire IP PrintWay address space.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Examine the accompanying IP PrintWay message to determine the appropriate response.

Source: Infoprint Server

ANFM103I   **Data set:** *dsname* **The time value** *timeval* **specified with the** *jclkeyw* **is not valid, the data set is released**

Explanation: The time value specified on the OUTPUT statement with the RETRYT, RETAINS, or RETAINF keyword was not valid. The format is SS, MM:SS, or HH:MM:SS. SS and MM are values from 0 to 59, and HH is a value from 0 to 99.

In the message text, *dsname* is the data set name. *timeval* is the time specification. *jclkeyw* is the JCL Keyword.

System Action: IP PrintWay releases the data set to

JES. JES will delete the data set from the JES spool.

Operator Response: No response is necessary.

User Response: Correct the options on the OUTPUT statement and resubmit the job.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM104I   An IP PrintWay SVC dump request created a partial dump

Explanation: The IP PrintWay ESTAI routine received a return code of X'04' from the system's SVC dump routine. The code indicates that a partial dump was taken.

System Action: Abend processing continues.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Increase the size of the SYS1.DUMPnn data set, if needed.

Source: Infoprint Server

ANFM105I   An IP PrintWay ESTAI cannot evaluate system completion code, *complcode*, module, *modulename*, abnormal termination will continue

Explanation: The IP PrintWay ESTAI routine is unable to continue because either the abend reason code was not issued by IP PrintWay, or the abend reason code was not available.

In the message text, *complcode* is the system completion code. *modulename* is the name of the failing module.

System Action: Abend processing continues.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Examine the SVC dump. Register 15 at the time of the abend may contain the abend reason code.

For assistance related to this error code, consult your service representative in the IBM Support Center, or use your electronic link with IBM service.

Source: Infoprint Server

ANFM106I   An IP PrintWay FSA ESTAI VSAM call (*vsfunc*) failed

Explanation: The FSA ESTAI routine was called during abnormal termination. While trying to clean up the VSAM transmission-queue data set, an error was encountered in the indicated function.

In the message text, *vsfunc* is the failing VSAM function.

System Action: Termination continues.

Operator Response: No response is necessary.

System Programmer Response: The message indicates a VSAM or IP PrintWay logic error.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM107I   There was an error at the Inventory Server, an indication of the error will appear on the *inventory* server log.

Explanation: The Printer Inventory Manager had an error; check the Printer Inventory Manager log to determine the error.

In the message text, *inventory* is the name of the Printer Inventory with the error.

System Action: IP PrintWay ends.

Operator Response: No response is necessary.

System Programmer Response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM108I   The Inventory Server by the name of *inventory* is not started. IP PrintWay will not start until the Printer Inventory server is running.

Explanation: The Printer Inventory Manager is not started. IP PrintWay will not start until the Printer Inventory Manager is running. The Printer Inventory Manager is required for IP PrintWay to format and deliver print.

In the message text, *inventory* is the name of the Printer Inventory with the error.

System Action: IP PrintWay does not start.

Operator Response: Start the Printer Inventory Manager manually, or change the name of the Printer Inventory in the PARM parameter on the IP PrintWay EXEC statement to the correct name. For more information about the PARM parameter on the EXEC statement, refer to *z/OS Infoprint Server Customization*. For more information about the Printer Inventory Manager, refer to *z/OS Infoprint Server Operation and Administration*.

System Programmer Response: If the error condition persists, contact your service representative in the IBM

Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM109I   **There is not enough storage to satisfy a request to the Inventory Server.**

Explanation: There is not enough storage to satisfy a request to the Printer Inventory Manager.

System Action: IP PrintWay ends abnormally.

Operator Response: No response is necessary.

System Programmer Response: Increase the IP PrintWay REGION size on the JCL statement. For more information, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

ANFM110I   **The Inventory Server API (AOPDBPKG) could not be loaded. The load failed with a return code of** *retcode* **and reason code of** *reasoncode***.**

Explanation: Load failed for module AOPDBPKG. The high-order half word is the abend code; the low-order half word is the reason code.

System Action: IP PrintWay ends.

Operator Response: No response is necessary.

System Programmer Response: Make sure the Printer Inventory Manager API (AOPDBPKG) is in the SYS1.LINKLIB. Look up the message's return and reason codes in *z/OS MVS System Codes* for more information about the error.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM112I   **Connection with the Inventory Server with the name of** *inventory* **was lost.**

Explanation: The connection with the Printer Inventory Manager was lost. IP PrintWay looked for a Printer Inventory with the name given in the message text.

In the message text, *inventory* is the name of the Printer Inventory with which IP PrintWay lost contact.

System Action: IP PrintWay ends abnormally.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM113I   **The EXEC parm value of INV= that identifies the name of the Inventory server was not found. The writer cannot be started.**

Explanation: A Printer Inventory name must be identified to IP PrintWay in the PARM parameter on the EXEC statement:

`PARM=(INV=xxxx)`

where *xxxx* is the one- to four-character name of the Printer Inventory.

System Action: IP PrintWay does not start.

Operator Response: No response is necessary.

System Programmer Response: Code the EXEC statement with the correct one- to four-character name for the Printer Inventory. For more information about the PARM parameter on the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

ANFM114I   **Data set:** *datasetname* **The time value** *timeval* **specified with the** *keyword* **is not valid, the data set is released.**

Explanation: For the data set named, the time value specified is not in the correct format on the RETRYT, RETAINS, or RETAINF keyword. The correct format is SS, MM:SS, or HH:MM:SS. SS and MM are values from 0 to 59; HH is a value from 0 to 99.

In the message text, *datasetname* is the name of the data set at the time of the error. *timeval* is the time value specified. *keyword* is the keyword with the incorrect time value.

System Action: The data set is released.

Operator Response: No response is necessary.

System Programmer Response: Correct the format and submit the data set again.

Source: Infoprint Server

ANFM115I   **The INV= string was not found on the EXEC parameter statement in the writer procedure.**

Explanation: A Printer Inventory name must be identified to IP PrintWay in the PARM parameter on the EXEC statement:

`PARM=(INV=xxxx)`

where *xxxx* is the one- to four-character name of the Printer Inventory.

System Action: IP PrintWay does not start.

Operator Response: Notify the system programmer.

System Programmer Response: Code the EXEC

statement with the correct one- to four-character name for the Printer Inventory. For more information about the PARM parameter on the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

ANFM116I   **There are more than four characters specified for the inventory server name on the EXEC parameter. The name must be 1 to 4 characters.**

Explanation: The INV= statement on the PARM parameter on the EXEC statement has a name that is not valid. The name of the Printer Inventory must be one to four characters. The Printer Inventory cannot be started until this value is correct. The correct format of the INV statement in the PARM parameter on the EXEC statement is:

```
PARM=(INV=xxxx)
```

where *xxxx* is the one- to four-character name of the Printer Inventory.

System Action: IP PrintWay does not start.

Operator Response: Notify the system programmer.

System Programmer Response: Code the EXEC statement with the correct one- to four-character name for the Printer Inventory. For more information about the PARM parameter on the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

ANFM117I   **The call to BPX1SSD returned a bad return code:** *retcode***.**

Explanation: The call to BPX1SSD could not be completed. The return code indicates the reason for the failure.

System Action: IP PrintWay ends.

Operator Response: Notify the system programmer.

System Programmer Response: Use the reason code and the extended reason code to determine the problem. For details on these codes, refer to *z/OS Language Environment Debugging Guide*.

Source: Infoprint Server

ANFM122I   **FSS:** *fssname* **IP PrintWay must be started by JES**

Explanation: IP PrintWay was started by some means other than JES.

In the message text, *fssname* is the FSS name from FSS definition.

System Action: The FSS ends.

Operator Response: No response is necessary.

System Programmer Response: Start IP PrintWay using the appropriate JES command.

Source: Infoprint Server

ANFM123I   **FSS:** *fssname* **IP PrintWay requires the FSI to run above the line**

Explanation: Your FSI is set up to run below the 16 M line, but IP PrintWay requires it to run above the line.

In the message text, *fssname* is the FSS name from the FSS definition.

System Action: The FSS ends.

Operator Response: No response is necessary.

System Programmer Response: Set up your FSI to run above the line.

Source: Infoprint Server

ANFM126I   **FSS:** *fssname* **The queue manager for this FSS has terminated**

Explanation: The transmission-queue manager terminated unexpectedly.

In the message text, *fssname* is the FSS name from the FSS definition.

System Action: The FSS ends.

Operator Response: No response is necessary.

System Programmer Response: See previous messages to determine why the transmission-queue manager terminated.

Source: Infoprint Server

ANFM130I   **FSA:** *fsaname* **An IP PrintWay initialization error occurred in module** *modname*

Explanation: The module mentioned encountered an initialization error.

In the message text, *fsaname* is the FSA name. *modname* is the name of failing module.

System Action: The FSA ends.

Operator Response: No response is necessary.

System Programmer Response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM131I Data set: *dsname* **No routing entry was found, the data set is held**

Explanation: IP PrintWay could not find a printer definition with the form name, class, and destination specified in the JCL for this data set; therefore, the data set is held by the system.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: Change the forms, class, or destination of the data set, or create a printer definition in the Printer Inventory for the current forms, class, and destination.

In the printer definition, ensure that the **Use DEST, CLASS, and FORMS for IP PrintWay printer selection** field is selected. This field is displayed on the main ISPF panel for the printer definitioin. If you use the Printer Inventory Definition Utility (PIDU) instead of ISPF panels to create or modify the printer definition, the corresponding printer attribute to specify is **dcf-routing=yes**

Source: Infoprint Server

ANFM132I Data set: *dsname* **The options entry** *optname* **was not found, the data set is held**

Explanation: The printer definition or the PRTOPTNS parameter in the OUTPUT JCL statement contains the name of an options component, but IP PrintWay could not find the named options component in the printer definition or Printer Inventory. An options component may be missing, or the name of the options component may be spelled incorrectly.

In the message text, *dsname* is the data set name. *optname* is the name of the options component specified in JCL or the printer definition.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

User Response: If the name of the options component is incorrect in the PRTOPTNS parameter, specify the correct name and resubmit the data set.

System Programmer Response: Either create an options component with the specified name in the Printer Inventory, or specify the correct options

component in the printer definition. Use the Infoprint Server ISPF panels to add a new options component or to modify the printer definition.

Source: Infoprint Server

ANFM133I Data set: *dsname* **The middle of a spanned record was found with no previous beginning, the data set is held**

Explanation: IP PrintWay found a spanned record middle segment, but was not currently processing a spanned record.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: See the JES I/O error message to determine an appropriate action.

Source: Infoprint Server

ANFM134I Data set: *dsname* **The end of a spanned record was found with no previous beginning, the data set is held**

Explanation: A spanned record end was found, but a spanned record was not currently being processed.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: See the JES I/O error message to determine an appropriate action.

Source: Infoprint Server

ANFM135I Data set: *dsname* **A spanned record is too big, the data set is held**

Explanation: A spanned record is bigger than the allowable maximum of 32 K.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: Make sure no records for IP PrintWay are bigger than 32K.

Source: Infoprint Server

ANFM136I   Data set: *dsname* **No end of a spanned record was found, the data set is held**

Explanation: A spanned record was started but not ended.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: See the JES I/O error message to determine an appropriate action.

Source: Infoprint Server

ANFM137I   IP PrintWay is terminating due to the requested ABEND

Explanation: The operator requested an abend.

System Action: IP PrintWay ends the requested level with an abend.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM138I   An IP PrintWay SVC dump received a return code of 04

Explanation: The operator requested a dump, but the dump request completed with a return code of 04, indicating that only a partial dump was performed.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: Allow more space for the dump data sets.

Source: Infoprint Server

ANFM139I   An IP PrintWay SVC dump received a return code of 08

Explanation: The operator requested a dump, but the dump request completed with a return code of 08, indicating no dump occurred.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: Allow more space for dump data sets or free a dump data set.

Source: Infoprint Server

ANFM140I   Data set: *dsname* **Writing of an IP PrintWay SMF6 record failed**

Explanation: A data set completed, and IP PrintWay attempted to write an SMF6 record but could not write the SMF record.

In the message text, *dsname* is the data set name.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: See any associated errors to correct the SMF problem.

Source: Infoprint Server

ANFM141I   Data set: *dsname* **Successful Transmission**

Explanation: The NOTIFY parameter caused notification for this data set to be sent, and its transmission worked.

In the message text, *dsname* is the data set name.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM142I   Data set: *dsname* **Unsuccessful Transmission**

Explanation: The NOTIFY parameter caused notification for this data set to be sent, and its transmission failed. For more information, see the IP PrintWay message log data set.

In the message text, *dsname* is the data set name.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM143I   The node *nodeid* **on the NOTIFY parameter is not valid**

Explanation: The NOTIFY parameter indicated this node, and it is not valid.

In the message text, *nodeid* is the name of the user's node.

System Action: Processing continues.

Operator Response: No response is necessary.

User Response: Specify the NOTIFY keyword with a valid node.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM144I   The submitter is not authorized to send status to *userid* **using the NOTIFY parameter**

Explanation: The NOTIFY parameter indicated this user, but the submitter is not authorized to send status to that user.

In the message text, *userid* is the name of submitter.

System Action: Processing continues.

Operator Response: No response is necessary.

User Response: Specify the NOTIFY keyword with an accessible user.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM145I   The NOTIFY command failed - code = *errorb*

Explanation: The NOTIFY command failed with the indicated code. 28 - storage, 08 - cancelled, other - logic error.

In the message text, *errorb* is the failure code byte.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

Source: Infoprint Server

ANFM146I   A NOTIFY error was received - code = *errorb*

Explanation: The NOTIFY command failed with the indicated code. It indicates a logic error.

In the message text, *errorb* is the failure code byte.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

Source: Infoprint Server

ANFM147I   A NOTIFY error was received - code = *errorb*

Explanation: The NOTIFY parameter failed with the indicated code.

In the message text, *errorb* is the failure code byte.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

Source: Infoprint Server

ANFM148I   Notify your system programmer

Explanation: See the previous messages for the error.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

Source: Infoprint Server

ANFM149I   Data set: *dsname* **Released, no transmission**

Explanation: The NOTIFY parameter caused notification for this data set to be sent. The data set was released to JES without attempting its transmission. This situation could occur if the data set was restarted from a JES checkpoint, or if the FSA was stopped.

In the message text, *dsname* is the data set name.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM150I Data set: *dsname* **IP was specified on the OUTPUT statement, but the PRTQUEUE keyword was not specified, the data set is released**

Explanation: The DEST=IP parameter was specified on the OUTPUT statement in the JCL for the data set; however, the required PRTQUEUE parameter was not also specified.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set to JES and requests that JES delete the data set from the JES spool.

Operator Response: No response is necessary.

User Response: Submit the data set again and specify the PRTQUEUE parameter.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM152I Data set: *dsname* **The BDS user exit** *bdsexit* **was not found**

Explanation: The printer definition that IP PrintWay used for this data set specified the name of a Begin Data Set exit. The named exit could not be located.

In the message text: *dsname* is the data set name. *bdsexit* is the name of the Begin Data Set exit as specified in the printer definition.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: If the name of the exit is correct, ensure that the exit routine is in the library search order (STEPLIB/LINKLIST). If the name of the exit is not correct, change the exit name in the IP PrintWay Options panel of the printer definition, using the Infoprint Server ISPF panels.

Source: Infoprint Server

ANFM153I Data set: *dsname* **The EDS user exit** *edsexit* **was not found**

Explanation: The printer definition that IP PrintWay used for this data set specified the name of an End Data Set exit. The named exit could not be located.

In the message text: *dsname* is the data set name. *edsexit* is the name of the End Data Set exit as specified in the printer definition.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: To attempt to transmit the data

set again, release the data set from hold status.

System Programmer Response: If the name of the exit is correct, ensure that the exit routine is in the library search order (STEPLIB/LINKLIST). If the name of the exit is not correct, change the exit name in the IP PrintWay Options panel of the printer definition, using the Infoprint Server ISPF panels.

Source: Infoprint Server

ANFM154I Data set: *dsname* **The record user exit** *record exit* **was not found**

Explanation: The printer definition that IP PrintWay used for this data set specified the name of a Record exit. The named exit could not be located.

In the message text: *dsname* is the data set name. *record exit* is the name of the Record exit as specified in the printer definition.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: If the name of the exit is correct, ensure that the exit routine is in the library search order (STEPLIB/LINKLIST). If the name of the exit is not correct, change the exit name in the IP PrintWay Options panel of the printer definition, using the Infoprint Server ISPF panels.

Source: Infoprint Server

ANFM155I *usrtxt*

Explanation: One of the IP PrintWay installation exits requested that IP PrintWay write this message to the IP PrintWay message-log data set. The *usrtxt* was generated by the exit. Refer to *z/OS Infoprint Server Customization* for information about how an exit can create messages.

System Action: IP PrintWay continues processing.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM156W An FSA in the IP PrintWay address space was unable to acquire storage

Explanation: A IP PrintWay FSA attempted to acquire storage but failed. Sufficient storage may be unavailable because IP PrintWay has retained a large number of data sets on the JES spool. IP PrintWay retains a data set on the JES spool after successful transmission or failed transmission if (1) the job submitter specifies a retain time in the RETAINS and RETAINF parameters on the OUTPUT JCL statement or if (2) the printer

definition used for the data set specifies a retention period.

System Action: If IP PrintWay is attempting to acquire a data set from JES when this error occurs, IP PrintWay does not acquire the data set. The data set remains on the JES spool and may be acquired again.

If IP PrintWay is attempting to transmit a data set when this error occurs, IP PrintWay retries the transmission. If IP PrintWay has already attempted the requested number of retries, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator Response: Notify your system programmer of this error.

To make more storage available, delete some of the data sets that IP PrintWay has retained on the JES spool. Use the Infoprint Server ISPF panels to list entries on the IP PrintWay transmission queue with a status of S (successful transmission) or F (failed transmission). These entries represent data sets retained on the JES spool. Consider deleting entries with a status of S before deleting entries with a status of F. Also consider deleting data sets that have been retained the longest. The Last Activity field in each entry contains the date and time of the last transmission attempt. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

System Programmer Response: Consider shortening the retention periods specified in the printer definitions in the Printer Inventory. For information about how to use the Infoprint Server ISPF panels to modify the printer definitions, refer to *z/OS Infoprint Server Operation and Administration* or the ISPF online help panels.

Source: Infoprint Server

ANFM157I   **Both PRTQUEUE and PORTNO JCL keywords were specified on the OUTPUT statement. The PRTQUEUE value is ignored.**

Explanation: IP PrintWay uses the PORTNO value when both PORTNO and PRTQUEUE JCL keywords are used on the OUTPUT statement. This message is for information only, to let you know that both keywords are specified and that only PORTNO is used.

System Action: Processing continues with the PORTNO value.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM158I   **Data set:** *datasetname* **No entry was found for the printer name, the data set is held PRINTER NAME =** *printer-name*

Explanation: No printer definition was found matching the printer of the named data set, so the data set is held by the system.

In the message text, *datasetname* is the data set at the time of the error. *printer-name* is the printer specified for the data set.

System Action: The data set is held.

Operator Response: No response is necessary.

System Programmer Response: Have the job submitter change the printer name of the data set and resubmit the job, or create a printer definition in the Infoprint Server Printer Inventory for the current printer name.

Source: Infoprint Server

ANFM159I   **Data set:** *datasetname* **An error occurred on the Inventory Server, the data set is held. Check the server log for an indication of the error.**

Explanation: The Printer Inventory Manager had an error.

In the message text, *datasetname* is the data set at the time of the error.

System Action: The data set is held by the system.

Operator Response: No response is necessary.

System Programmer Response: Determine and fix the cause of the error; then reset the data set. For information on resetting the data set, refer to *z/OS Infoprint Server Operation and Administration*.

Source: Infoprint Server

ANFM160I   **Data set:** *datasetname* **The printer inventory server is not responding**

Explanation: IP PrintWay could not start or contact the Printer Inventory Manager.

In the message text, *datasetname* is the data set at the time of the error.

System Action: The data set is held.

Operator Response: No response is necessary.

System Programmer Response: Find and fix the server error, then reset the data set. For more information on the Printer Inventory Manager and on resetting the data set, refer to *z/OS Infoprint Server Operation and Administration*.

Source: Infoprint Server

ANFM161I   **Data set:** *datasetname* **No Printer Inventory entry was found for the options name specified either through JCL or the Routing exit. The data set is held. Entry name =** *componentname*

Explanation: No component was found in the Infoprint Server Printer Inventory with the requested component name. A Processing, IP PrintWay Options, or Protocol component with the requested name must exist in the Printer Inventory.

In the message text, *datasetname* is the data set at the time of the error. *componentname* is the name of the component that was requested either in the PRTOPTNS JCL parameter of the OUTPUT statement or in the IP PrintWay routing exit.

System Action: The data set is held by the system.

Operator Response: No response is necessary.

System Programmer Response: Correct the component name in the PRTOPTNS JCL parameter or in the Routing exit. If the component name is correct, create a Processing, IP PrintWay Options, or Protocol component with that name in the Infoprint Server Printer Inventory. For information about how to create components for the PRTOPTNS parameter, refer to *z/OS Infoprint Server Operation and Administration*.

Source: Infoprint Server

ANFM162I   **Data set:** *datasetname* **A bad key was detected by the inventory server. The data set is held. Entry name =** *printer-name*

Explanation: The Printer Inventory Manager was called with a bad key.

In the message text, *datasetname* is the data set at the time of the error. *printer-name* is the printer specified for the data set.

System Action: The data set is held.

Operator Response: No response is necessary.

System Programmer Response: Find and fix the error, and then reset the data set. This problem can be caused by routing exit processing in which the Route name was changed from DEST, CLASS and FORMS to a printer definition name, but the Routing Type was not changed accordingly.

Source: Infoprint Server

ANFM163I   **ANFLIB=***libpath*

Explanation: This informational message tells you the path name of ANFLIB DD.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM164I   **ANFCALL=***callpath*

Explanation: This informational message tells you the path name of ANFCALL DD.

System Action: Processing continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM165I   **Data set:** *datasetname* **The VTAM feature is not enabled or the APPLID is not coded on the FSS definition, the data set is held.**

Explanation: IP PrintWay attempted to transmit a data set to a VTAM-controlled printer. To print to a VTAM-controlled printer, your installation must install the Coax Printer Support feature of Infoprint Server Transforms and enable Infoprint Server Transforms. Also, you must create a VTAM application program resource definition (APPL) for IP PrintWay and specify the APPL ID in an FSS definition in the Printer Inventory. This message indicates that either you did not enable the Coax Printer Support feature or did not specify the APPL ID in the FSS definition.

In the message text, *datasetname* is the data set at the time of the error.

System Action: The data set is placed on the system hold queue, and IP PrintWay continues processing other data sets.

Operator Response: Notify the system programmer that this error occurred. After the problem is corrected, restart the IP PrintWay FSS to pick up any changes to the APPL ID in the FSS definition in the Printer Inventory. Then, release the data set from the system hold queue.

System Programmer Response: Make sure that Infoprint Server Transforms is enabled. Also, create an FSS definition for the IP PrintWay FSS and specify the name of the VTAM APPL statement for IP PrintWay. For more information about how to enable Infoprint Server Transforms and how to specify the APPL ID in an FSS definition, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

ANFM166I   The SNA feature is not enabled.

Explanation: The FSS definition for IP PrintWay in the Printer Inventory specifies a VTAM APPL ID, indicating that you want IP PrintWay to print to VTAM-controlled printers. To print to VTAM-controlled printers, your installation must install the Coax Printer Support feature of Infoprint Server Transforms, and you must enable Infoprint Server Transforms.

System Action: Processing continues.

Operator Response: Notify the system programmer that this error occurred. Restart the IP PrintWay FSS to pick up any changes the system programmer makes to the FSS definition in the Printer Inventory.

System Programmer Response: Either enable Infoprint Server Transforms or remove the APPL ID from the FSS definition. If you remove the APPL ID, IP PrintWay will not be able to print to VTAM-controlled printers. For information about how to do these tasks, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

ANFM167I   The VTAM ACB initialization failed with a return code = *returncode*. Verify that the APPLID name is correct.

Explanation: The VTAM ACB macro failed. The APPL ID specified in the FSS definition in the Printer Inventory for the IP PrintWay functional subsystem (FSS) might be incorrrect.

In the message text, *returncode* is the return code from the VTAM ACB macro.

System Action: Processing continues.

Operator Response: Notify your system programmer that this error occurred. After the error is corrected, restart the IP PrintWay FSS to pick up changes to the FSS definition in the Printer Inventory.

System Programmer Response: Make sure that the APPL ID specified in the FSS definition matches the name of an APPL statement defined to VTAM. For information about the APPL statement and FSS definition, refer to *z/OS Infoprint Server Customization*.

Refer to *z/OS Communications Server: IP and SNA Codes* for information about the VTAM return code.

Source: Infoprint Server

ANFM170I   Data set: *dsname* The TCP/IP HOSTNAME is not configured. Correct the TCP/IP configuration and restart the FSA again.

Explanation: TCP/IP is not configured with a host name. In the message text, *dsname* is the data set name.

System Action: The data set is released to JES and is put into a hold status.

Operator Response: Notify your system programmer that this error occurred. After the error is corrected, restart the IP PrintWay FSA and release the data set from the system hold queue.

System Programmer Response: Code a HOSTNAME in either the *hlq*.TCPIP.DATA data set or in the **/etc/resolv.conf** file.

Source: Infoprint Server

ANFM171I   Data set: *dsname* The printer type: *type* is invalid for IP PrintWay.

Explanation: The printer definition that IP PrintWay selected in the Infoprint Server Printer Inventory to print the data set is not the correct type. The printer definition must be an IP PrintWay printer definition.

In the message text, *dsname* is the data set name and *type* is the type of the printer definition: PSF-MVS, GENERAL, or UNKNOWN.

System Action: The data set is released to JES and is put into a hold status.

Operator Response: Notify your system programmer that this error occurred. After the error is corrected, release the data set from the system hold queue.

System Programmer Response: Inspect the DEST, CLASS, and FORMS values of the output data set to determine which printer definition IP PrintWay selected to print the data set. If that is not possible, you can use the Infoprint Server ISPF panels to list all printer definitions with the invalid type identified in the message text and attempt to determine which printer definition has caused this problem.

If the DEST, CLASS, and FORMS values on the JCL are incorrect and caused IP PrintWay to select the wrong printer definition, change the DEST, CLASS, and FORMS values of the output data set. Otherwise, use the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (PIDU) to change the type of the printer definition; the type must be IP PrintWay.

Source: Infoprint Server

ANFM600I   FSS: *fssname* The queue manager has been started

Explanation: The queue manager component for the listed FSS has been started.

In the message text, *fssname* is the FSS name from the FSS definition.

System Action: The queue manager component continues processing normally.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM601I   Data set: *dsname* **The data set was successfully transmitted to host and queue:** *host queue*

Explanation: The listed data set has been successfully transmitted.

In the message text, *dsname* is the data set name. *host* is the target host. *queue* is the target print queue.

System Action: The queue manager module continues processing normally.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM602I   Data set: *dsname* **The data set was not successfully transmitted to host and queue:** *host queue*

Explanation: The listed data set was not successfully transmitted (including any retries).

In the message text, *dsname* is the data set name. *host* is the target host. *queue* is the target print queue.

System Action: Queue manager continues processing normally.

Operator Response: This message may be due to a transient error in the network, the target system, or printer. If you see the message several times for a particular target system or printer, it may indicate a problem at that system. In this case, notify your system programmer of this error.

System Programmer Response: If this message recurs for a particular target system or printer, attempt to determine the reason data cannot be successfully transmitted, and correct the problem.

Source: Infoprint Server

ANFM603I   Data set: *dsname* **The data set is being released with a JES checkpoint**

Explanation: The IP PrintWay FSA is being stopped. IP PrintWay releases the data set to JES with checkpoint information. The data set remains on the JES spool and can be acquired again. If it is acquired again, IP PrintWay will use the retry and restart status information in the checkpoint.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set to JES with checkpoint information. The FSA continues normal termination.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM604I   Data set: *dsname* **The data set is being released to JES**

Explanation: The retention period specified for the data set has expired. The retention period is specified either on the OUTPUT JCL statement or in the printer definition. The data set is being released to JES and will be deleted from the JES spool.

In the message text, *dsname* is the data set name.

System Action: IP PrintWay releases the data set back to JES and requests that the system delete it.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM605I   Data set: *dsname* **The data set is being released to JES due to an error**

Explanation: The listed data set is being released to JES following an error.

In the message text, *dsname* is the data set name.

System Action: The data set is released to JES and is put into a hold status.

Operator Response: Either an I/O error was encountered when IP PrintWay tried to read the records of the data set from the JES spool, or an exit routine or FCB routine produced a terminating return code. If you want to attempt the data set again, it must first be released from hold status.

Notify your system programmer of this error.

System Programmer Response: Refer to other system messages associated with this I/O error to determine the correct response.

Source: Infoprint Server

ANFM606I   Data set: *dsname* **The data set was successfully transmitted to host and port:** *host port*

Explanation: The listed data set has been successfully transmitted. In the message text, *dsname* is the data set name. *Host* is the target host. *Port* is the target port.

System Action: The queue manager module continues processing normally.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM607I **Data set:** *dsname* **The data set was not successfully transmitted to host and port:** *host port*

Explanation: The listed data set was not successfully transmitted (including any retries).

In the message text, *dsname* is the data set name. *Host* is the target host. *Port* is the target port.

System Action: The queue manager module continues processing normally.

Operator Response: This message may be due to a transient error in the network, the target system, or printer. If you see the message several times for a particular target system or printer, it may indicate a problem at that system. In that case, notify your system programmer of this error.

System Programmer Response: If this message recurs for a particular target system or printer, attempt to determine the reason that data cannot be successfully transmitted, and correct the problem.

Source: Infoprint Server

ANFM690I **The IP PrintWay queue manager ESTAI routine VSAM call (***vsfunc***) failed**

Explanation: The transmission-queue manager ESTAI routine was called during abnormal termination. While IP PrintWay was trying to clean up the VSAM transmission-queue data set, an error was encountered in the indicated function.

In the message text, *vsfunc* is the failing VSAM function.

System Action: Termination continues.

Operator Response: No response is necessary.

System Programmer Response: The message indicates a VSAM or IP PrintWay logic error.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM691I **Data set:** *dsname* **The queue manager ESTAI routine has deleted the transmission queue entry for this data set**

Explanation: The entry in the transmission queue for the listed data set has been deleted by the queue manager ESTAI during abend recovery processing. This is normal processing. The data set remains on the JES

spool and is available for subsequent printing.

In the message text, *dsname* is the data set name.

System Action: Termination continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM699I **FSS:** *fssname* **The queue manager has stopped**

Explanation: The queue manager for the listed FSS has been stopped.

In the message text, *fssname* is the FSS name from the FSS definition.

System Action: Queue manager continues termination.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM700I **Data set:** *dsname* **The data set has been acquired by** *fsaname*

Explanation: The listed data set has been acquired from JES, and IP PrintWay has made a transmission queue entry for it.

In the message text, *dsname* is the data set name. *fsaname* is the FSA name.

System Action: A subsequent attempt will be made to transmit the data set.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM701I **Data set:** *dsname* **The data set was successfully transmitted to URL:** *printer-url*

Explanation: The listed data set has been successfully transmitted to the printer.

In the message text, *dsname* is the data set name. *printer-url* is the Uniform Resource Locator (URL) of the target printer.

System Action: IP PrintWay continues processing normally.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM702I   **Data set:** *dsname* **The data set was not successfully transmitted to URL:** *printer-url*

Explanation: The listed data set was not successfully transmitted to the printer. IP PrintWay has completed all attempts to retry the transmission.

In the message text, *dsname* is the data set name. *printer-url* is the Uniform Resource Locator (URL) of the target printer.

System Action: IP PrintWay continues processing normally.

Operator Response: This message may be due to a transient error in the network, the target system, or printer. If you see the message several times for a particular target system or printer, it may indicate a problem at that system. In that case, notify your system programmer of this error.

System Programmer Response: If this message recurs for a particular target system or printer, attempt to determine the reason data cannot be successfully transmitted, and correct the problem.

Source: Infoprint Server

ANFM703I   **Data set:** *dsname* **The data set was successfully sent to e-mail address:** *addresses*

Explanation: z/OS UNIX sendmail, a component of z/OS Communications Server, accepted the **sendmail** command from IP PrintWay to send the data set to the e-mail recipients.

In the message text, *dsname* is the data set name, and *addresses* is the list of e-mail addresses of the e-mail recipients.

System Action: Sendmail attempts to send the e-mail to the recipients. IP PrintWay continues processing.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM704I   **Data set:** *dsname* **The data set was not successfully sent to e-mail address:** *addresses*

Explanation: z/OS UNIX sendmail, a component of z/OS Communications Server, did not successfully execute the **sendmail** command from IP PrintWay to send the data set to the e-mail recipients. This error might indicate that sendmail is not installed correctly, that sendmail did not find an alias name in its aliases file, or that an e-mail address on the local system does not exist. An associated message explains the error in more detail.

In the message text, *dsname* is the data set name and *addresses* is the list of e-mail addresses of the e-mail recipients.

System Action: IP PrintWay continues processing.

Operator Response: See the associated IP PrintWay error message to determine the sendmail error.

System Programmer Response: Determine the reason for the sendmail error, and correct the problem. Some possible problems and solutions are:

- If sendmail did not recognize an alias name, run the sendmail **newaliases** command to update the sendmail aliases file.
- If the e-mail address is incorrect, correct the address in the printer definition in the Infoprint Server Printer Inventory.

Source: Infoprint Server

ANFM1100T   **The TCP/IP INITAPI call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP INITAPI call failed for this FSA.

In the message text, *errno* is the TCP/IP ERRNO returned from INITAPI.

System Action: The FSA ends.

Operator Response: No response is necessary.

System Programmer Response: Check the ERRNO in *z/OS Communications Server: IP Application Programming Interface Guide* for the cause.

Source: Infoprint Server

ANFM1101I   **The TCP/IP GETHOSTNAME call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP GETHOSTNAME call failed for this FSA.

In the message text, *errno* is the TCP/IP ERRNO returned from GETHOSTNAME.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Check the ERRNO in *z/OS Communications Server: IP Application Programming Interface Guide* for the cause.

Source: Infoprint Server

ANFM1102T The hyperspace initialization failed with a return code of (*retcode*) and a reason code of (*reasoncode*)

Explanation: The DSPSERV macro call failed for this FSA.

In the message text, *retcode* is the DSPSERV macro return code from the CREATE request. *reasoncode* is the DSPSERV macro reason code from CREATE request.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Check the return and reason code in *z/OS MVS System Codes* for the cause.

Source: Infoprint Server

ANFM1103I Data set: *datasetname* **IP address:** *ipaddress* **The TCP/IP BIND call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP BIND call failed for the target address for the well-known port range from 721 to 731.

In the message text:
datasetname   Name of the data set
ipaddress   Printer's IP address or host name
errno   TCP/IP ERRNO returned from BIND

Also see "Troubleshooting Infoprint Server" on page 167 for more information about this message.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Look up the ERRNO value in *z/OS Communications Server: IP Application Programming Interface Guide* to determine the cause of the problem.

An ERRNO value of 60 indicates that the IP PrintWay connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the **Connection timeout** field in the printer definition in the Printer Inventory.

Source: Infoprint Server

ANFM1104I Data set: *datasetname* **IP address:** *ipaddress* **The TCP/IP SOCKET CONNECT call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP CONNECT failed for the target address.

In the message text:
datasetname   Name of the data set
ipaddress   Printer's IP address or host name
errno   TCP/IP ERRNO returned from CONNECT

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Look up the ERRNO value in *z/OS Communications Server: IP Application Programming Interface Guide* to determine the cause of the problem.

An ERRNO value of 60 indicates that the IP PrintWay connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the **Connection timeout** field in the printer definition in the Printer Inventory.

If the ERRNO value is 54, also check the system console log for a possible error message from the Print Interface component of Infoprint Server. (Print Interface

messages have an AOP prefix.) Print Interface issues an error message if an error occurred when IP PrintWay resubmitted the data set to Print Interface in order to transform the data from one format to another. This situation occurs when the **Resubmit for filtering** field is selected in the printer definition.

Source: Infoprint Server

ANFM1105I   Data set: *datasetname* **IP address:** *ipaddress* **The TCP/IP IOCTL call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP IOCTL call failed for the target address.

In the message text:
datasetname   Name of the data set
ipaddress   Printer's IP address or host name
errno   TCP/IP ERRNO returned from IOCTL

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Look up the ERRNO value in *z/OS Communications Server: IP Application Programming Interface Guide* to determine the cause of the problem.

An ERRNO value of 60 indicates that the IP PrintWay connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the **Connection timeout** field in the printer definition in the Printer Inventory.

Source: Infoprint Server

ANFM1106I   Data set: *datasetname* **IP address:** *ipaddress* **The TCP/IP SET SOCKET OPTION call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP SETSOCKOPT failed for this data set.

In the message text:
datasetname   Name of the data set
ipaddress   Printer's IP address or host name

errno   TCP/IP ERRNO returned from SETSOCKOPT

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify your system programmer of this error.

System Programmer Response: Look up the ERRNO value in *z/OS Communications Server: IP Application Programming Interface Guide* to determine the cause of the problem.

An ERRNO value of 60 indicates that the IP PrintWay connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the **Connection timeout** field in the printer definition in the Printer Inventory.

Source: Infoprint Server

ANFM1107I   Data set: *datasetname* **IP address:** *ipaddress* **The TCP/IP SOCKET call failed with an ERRNO value of (***errno***)**

Explanation: The TCP/IP SOCKET call failed for this data set.

In the message text:
datasetname   Name of the data set
ipaddress   Printer's IP address or host name
errno   TCP/IP ERRNO returned from SOCKET

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Look up the ERRNO value in *z/OS Communications Server: IP Application Programming Interface Guide* to determine the cause of the problem.

ANFM1108I   Data set: *datasetname* **The data set received a TCP/IP SOCKET RECEIVE error with an ERRNO value of (***errno***)**

Explanation: The TCP/IP RECEIVE function indicated that the communication partner has closed the connection.

In the message text, *datasetname* is the name of the data set at time of the error. *errno* is the TCP/IP ERRNO returned from RECEIVE.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Check the ERRNO in *z/OS Communications Server: IP Application Programming Interface Guide* for the cause.

Source: Infoprint Server

ANFM1109I   Data set: *datasetname* **The data set received a TCP/IP SOCKET RECEIVE error with an ERRNO value of (***errno***)**

Explanation: The TCP/IP RECEIVE function failed.

In the message text, *datasetname* is the name of the data set. *errno* is the TCP/IP ERRNO returned from RECEIVE.

Also see "Troubleshooting Infoprint Server" on page 167 for more information about this message.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Check the ERRNO in *z/OS Communications Server: IP Application Programming Interface Guide* for the cause. If the errno is 54 and the printer is an HP printer with a JetDirect card, also see "Troubleshooting Infoprint Server" on page 167 for more information.

Source: Infoprint Server

ANFM1110I   Data set: *datasetname* **The data set received a TCP/IP SOCKET SEND error with an ERRNO value of (***errno***)**

Explanation: The TCP/IP SEND function failed.

In the message text, *datasetname* is the name of the data set at time of the error. *errno* is the TCP/IP ERRNO returned from SEND.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Check the ERRNO in *z/OS Communications Server: IP Application Programming Interface Guide* for the cause.

Source: Infoprint Server

ANFM1111I   IP address: *ipaddress* **The name or address specified is not recognized as a host name or valid dotted decimal address**

Explanation: The host name or address cannot be resolved.

In the message text, *ipaddress* is the target IP address or name at the time of the error.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Try to ping the target host using the address or name specified in JCL or in the printer definition.

System Programmer Response: Check the ERRNO in *z/OS Communications Server: IP Application Programming Interface Guide* for the cause.

Source: Infoprint Server

ANFM1112I Data set: *datasetname* **An unsupported record format was found, FIXED and VARIABLE record formats are supported**

Explanation: A record format other than Fixed or Variable was detected.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Reblock or create a translate table that has either a Fixed or Variable record format.

Source: Infoprint Server

ANFM1113I Data set: *datasetname* **The end of data set was found before the SBCS or DBCS translate table could be read for the data set**

Explanation: The end of the data set was found before IP PrintWay read the translate table.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the single-byte or double-byte translate table data set, or specify another table.

Source: Infoprint Server

ANFM1114I Data set: *datasetname* **The SYNAD exit executed indicating an error for the SBCS or DBCS translate table**

Explanation: The SYNAD exit was called, indicating an I/O error.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the single-byte or double-byte translate table, or specify another table.

Source: Infoprint Server

ANFM1115I Data set: *datasetname* **A record greater than 256 bytes for a fixed block data set or greater than 260 bytes for a variable blocked data set was returned on a GET macro for the SBCS translate table data set**

Explanation: A single-byte data set translate table must not be larger than 256 bytes.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the single-byte translate table or specify another table.

Source: Infoprint Server

ANFM1116I Data set: *datasetname* **The OPEN call failed for the translate table**

Explanation: The last data set in the search order could not be opened.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Refer to *z/OS Infoprint Server Operation and Administration* for the data set search order. One of these data sets must be cataloged on the system.

Source: Infoprint Server

ANFM1117I   Hyperspace request is larger than the maximum allowed of 524 288 blocks

Explanation: The maximum size of a hiperspace request is 524 288 blocks.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: The maximum size that can be requested is 524 288 blocks.

Source: Infoprint Server

ANFM1118I   Data set: *datasetname* **The SVC99 call failed with a return code of (***retcode***), an S99ERROR code of (***errorcode***) and an S99INFO code of (***infocode***)**

Explanation: SVC99 dynamic allocation failed. The message is displayed only when internal or external tracing is active. The message is not an error message unless none of the translate tables can be allocated. This message will appear if the data set name is not on the system. The following search order for DBCS translate tables is used if the XLATETABLE LPR option is specified:

1. translate_table_name.language_name
2. tcpip_hlq.translate_table_name.language_name
3. tcpip_hlq.STANDARD.language_name

The following search order for single-byte translate tables is used if the XLATETABLE LPR option is specified:

1. translate_table_name.TCPXLBIN
2. tcpip_hlq.translate_table_name.language_name

The following search order for DBCS translate tables is used if the XLATETABLE LPR option is NOT specified:

1. tcpip_hlq.LPR.language_name
2. tcpip_hlq.STANDARD.language_name

The following search order for single-byte translate tables is used if the XLATETABLE LPR option is NOT specified:

1. tcpip_hlq.LPR.TCPXLBIN
2. tcpip_hlq.STANDARD.TCPXLBIN

In the message text, *datasetname* is the name of the data set. *retcode* is the return code. *errorcode* is the error code. *infocode* is the information code.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Refer to *z/OS Infoprint Server Operation and Administration* for the data set search order. One of these data sets must be cataloged on the system.

Source: Infoprint Server

ANFM1119I   Data set: *datasetname* **The data set has exceeded the hyperspace allocation for this FSA**

Explanation: The hiperspace default size or the size specified in the FSS definition for the IP PrintWay functional subsystem (FSS) in the Printer Inventory has been exceeded for this data set.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Increase the hiperspace size in the FSS definition for the IP PrintWay FSS in the Infoprint Server Printer Inventory. You can use the Infoprint Server ISPF panels to change the hiperspace size. After you change the hiperspace value, restart the IP PrintWay FSS so that IP PrintWay picks up the changes in the FSS definition.

Source: Infoprint Server

ANFM1120I   The host name of the system where IP PrintWay is running: *hostname*

Explanation: This informational message, which is issued for each data set IP PrintWay processes, displays the host name of the z/OS system where IP PrintWay is running. In the message text, *hostname* is the host name returned by the TCP/IP GETHOSTNAME function call.

System Action: Processing continues.

Operator Response: If the host name is not correct, notify your system programmer that this error occurred.

System Programmer Response: If this host name is not correct, configure the z/OS host name correctly in TCP/IP. You do *not* need to restart IP PrintWay after you reconfigure TCP/IP. Then, verify that this message displays the correct host name the next time it is issued.

You can ignore this message if IP PrintWay does not use the LPR transmission protocol. You can view the printer definitions in the Infoprint Server Printer Inventory to determine which transmission protocols IP PrintWay uses.

Source: Infoprint Server

ANFM1121I   Hostname from GETHOSTNAME call is invalid.

Explanation: The TCP/IP GETHOSTNAME function call returned a host name that is too long. This condition generally indicates that the z/OS host name is incorrectly configured in TCP/IP.

System Action: IP PrintWay uses the first 8 characters of the z/OS host name when it transmits the data set to the printer. The host name that the printer's LPD prints on the banner (separator) page and on page headers will probably not be correct. IP PrintWay obtains a new z/OS host name each time it transmits a new data set.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: Configure the z/OS host name correctly in TCP/IP. You do *not* need to restart IP PrintWay after you reconfigure TCP/IP. Then, verify that message ANFM1120I displays the correct host name.

You can ignore this message if IP PrintWay does not use the LPR transmission protocol. You can view the printer definitions in the Infoprint Server Printer Inventory to determine which transmission protocols IP PrintWay uses.

Source: Infoprint Server

ANFM1149I   Data set: *datasetname* **The LPR option TRANSLATETABLE or XLATETABLE name could not be loaded**

Explanation: The translation option TRANSLATETABLE or XLATETABLE name could not be loaded from disk.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Specify the translation TRANSLATETABLE or XLATETABLE option with a valid name of a data set. The following search order is used:

1.   translate_table_name.language_name

2.   tcpip_hlq.translate_table_name.language_name

3.   tcpip_hlq_name.STANDARD.language_name

or check the IP PrintWay message log data set for indication of an I/O error.

Source: Infoprint Server

ANFM1158I   Data set: *datasetname* **The default single byte translate table could not be loaded**

Explanation: The default single-byte translation table could not be loaded from disk.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS*

Infoprint Server Operation and Administration for more information.

Operator Response: No response is necessary.

System Programmer Response: The default single-byte translation table is loaded using a valid name of a data set. The following search order is used:

1. tcpip_hlq_name.LPR.TCPXLBIN
2. tcpip_hlq_name.STANDARD.TCPXLBIN

or check the IP PrintWay message log data set for any indication of an I/O error.

Source: Infoprint Server

ANFM1160I   The TCP/IP INITAPI call failed with an ERRNO value of *errno*

Explanation: The TCP/IP INITAPI call failed for this FSA and this job.

In the message text, *errno* is the TCP/IP ERRNO returned from INITAPI.

System Action: The FSA continues processing.

Operator Response: No response is necessary.

System Programmer Response: Look up the ERRNO in the *z/OS Communications Server: IP Application Programming Interface Guide* to determine the cause of the error.

Source: Infoprint Server

ANFM1164I   Data set: *datasetname* **The LPR option LANDSCAPE conflicts with a PostScript data set**

Explanation: The formatting option LANDSCAPE was specified for a data set that is PostScript. These are incompatible options.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Remove the formatting LANDSCAPE option for a PostScript data set.

Source: Infoprint Server

ANFM1165I   Data set: *datasetname* **The CC LPR option was specified for a PostScript data set, or a PostScript data set has carriage control**

Explanation: The transmission protocol LPR option CC was specified for a data set that is PostScript, or a PostScript data set has been detected as having carriage control characters in it. These are incompatible formats.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Print the data set as either a PostScript data set or as a data set with carriage control.

Source: Infoprint Server

ANFM1166I   Data set: *datasetname* **At least one record was found with a carriage control that IP PrintWay does not support. The record was printed with a line feed, or a line termination string if one was specified. Verify that the output is correct.**

Explanation: IP PrintWay supports ANSI and machine carriage controls for Print (no space), Space 1 line, Space 2 lines, Space 3 lines, and Skip to Channel 1. If Use FCB is specified as a formatting option, Skip to Channels 2-12 are also supported. All other controls are not supported. Each record that has an unsupported carriage control is printed using single space mode or the line termination string if one was specified.

System Action: No action is necessary.

Operator Response: No response is necessary.

System Programmer Response: Verify the printed output is correct.

Source: Infoprint Server

ANFM1168I   Data set: *datasetname* **A record greater than 5124 bytes or a non-variable blocked data set was returned on a GET macro for the DBCS translate table data set**

Explanation: A double-byte translate table data set must have variable blocked format with a record length of 5124.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the double-byte translate table data set or specify another translate table.

Source: Infoprint Server

ANFM1169I   Data set: *datasetname* **Data which is not valid was found in the DBCS translate table, loading has been stopped**

Explanation: A double-byte translation table is being loaded for the data set named in the message. The translation table does not contain data in the format required for double-byte translation tables.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the double-byte translate table data set or specify another translate table.

Source: Infoprint Server

ANFM1170I   Dataset *datasetname* **The DBCS translate table could not be found, loading has been stopped**

Explanation: A double-byte translation table is being loaded for the data set named in the message. The language-specific translation table could not be found within the translate table data set.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the double-byte translate table data set or specify another translate table.

Source: Infoprint Server

ANFM1171I   Dataset *datasetname* **The DBCS translate table data set has a size greater than the maximum allowed**

Explanation: A double-byte translation table being loaded for the data set named in the message has a size greater than 131 070 bytes.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the double-byte translate table data set or specify another translate table.

Source: Infoprint Server

ANFM1172I   Dataset *datasetname* **The DBCS translate table data set OPEN call failed**

Explanation: The last data set in the search order could not be opened for the data set named in the message.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Refer to *z/OS Infoprint Server Operation and Administration* for the data set search order. One of these data sets must be cataloged on the system. Verify that the CONVXLAT program has created the double-byte translate table data set that is specified by the table search hierarchy. Refer to *z/OS Communications Server: IP Configuration Reference* for more information on CONVXLAT.

Source: Infoprint Server

ANFM1173I   Dataset *datasetname* **During EBCDIC DBCS conversion to ASCII, the first double-byte character:** *firstchar* **is not valid**

Explanation: The first character of a double-byte character, with the specified value, is not in the valid range for EBCDIC double-byte characters.

In the message text, *datasetname* is the name of the data set. *firstchar* is the first character of a double-byte character in the data set.

System Action: The erroneous character is translated using a single-byte EBCDIC to ASCII translation table. If the translation mode uses shift-out and shift-in characters to delimit single-byte and double-byte ASCII data, a shift-in character is added before the erroneous character. Data continues to be translated using the single-byte translation table until an EBCDIC shift-out character is encountered.

Operator Response: No response is necessary.

System Programmer Response: Ensure that the data set being transmitted contains valid EBCDIC double-byte characters. EBCDIC double-byte characters are enclosed within shift-out X'0E' and shift-in X'0F' characters.

Source: Infoprint Server

ANFM1174I   Dataset *datasetname* **During EBCDIC DBCS conversion to ASCII, the second double-byte character:** *firstchar* *secondchar* **is not valid**

Explanation: The second character of a double-byte character, with the specified value, is not in the valid range for EBCDIC double-byte characters.

In the message text, *datasetname* is the name of the data set. *firstchar* is the first character of a double-byte character in the data set. *secondchar* is the second character of a double-byte character in the data set.

System Action: The erroneous character is translated using single-byte EBCDIC to ASCII translation tables. If the translation mode uses shift-out and shift-in characters to delimit single-byte and double-byte ASCII data, a shift-in character is added before the erroneous character. Data continues to be translated using the single-byte translation table until an EBCDIC shift-out character is encountered.

Operator Response: No response is necessary.

System Programmer Response: Check the contents of the data being transmitted to see if it contains valid double-byte characters. EBCDIC double-byte characters are enclosed within shift-out X'0E' and shift-in X'0F' characters.

Source: Infoprint Server

ANFM1175I   Dataset *datasetname* **The DBCS translation table for the specified IP PrintWay DBCS translation type could not be loaded**

Explanation: The double-byte translation table could not be loaded from disk. See previous messages for indication of an allocation error.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Specify the translation option TRANSLATETABLE or XLATETABLE with a valid name for a translate table. Refer to *z/OS Infoprint Server Operation and Administration* for the data set search order. One of the data sets in the search order must be cataloged on the system.

Source: Infoprint Server

ANFM1180I   Data set: *datasetname* **The data set is larger than the maximum document size.**

Explanation: A value was entered in the **Maximum document size** field of the printer definition, and the data set is larger than the size specified. This field specifies the maximum document size to send to the printer or e-mail destination.

In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay attempts to again transmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change the printer definition's options and routing information, if necessary, and also to retransmit the data set if IP PrintWay has completed all retries. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Specify the target system to a system that has enough space, or modify the maximum document size option.

Source: Infoprint Server

Source: Infoprint Server

ANFM1190I   Data set: *datasetname* **At least one record was found with a skip to a channel that is not defined in the FCB. The record was printed with a line feed, or with a line termination string if one was specified. Verify that the output is correct.**

Explanation: The data contains a skip to channel carriage control that causes a skip to a channel, which is undefined in the current active FCB. The line is printed, followed by a line feed or line termination string if the data set has a machine carriage control. If the data set has an ANSI carriage control, the line is preceded by a line feed or a line termination string.

System Action: No action is necessary.

Operator Response: No response is necessary.

System Programmer Response: Verify the printed output is correct.

Source: Infoprint Server

ANFM1193I   Data set: *datasetname* **FCB was specified, but the data set does not have carriage control**

Explanation: The formatting options associated with the failed job contains the option Use FCB, but the data set does not have a carriage control.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Do not select the Use FCB option in the **Formatting** field of the printer definition.

Source: Infoprint Server

ANFM1194I   Data set: *datasetname* **The OPEN call failed for SYS1.IMAGELIB**

Explanation: The return code from either the allocate or from the open DCB for SYS1.IMAGELIB indicated an error.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: Ensure the SYS1.IMAGELIB is cataloged on the system.

Source: Infoprint Server

ANFM1195I   Data set: *datasetname* **FCB** *FCBname* **was not found in SYS1.IMAGELIB**

Explanation: The FCB name specified was not found in SYS1.IMAGELIB with a prefix of FCB4, FCB2, or FCB3.

System Action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator Response: To attempt to transmit the data set again, release the data set from hold status.

System Programmer Response: Ensure that the member name is spelled correctly, and that the member exists in SYS1.IMAGELIB.

Source: Infoprint Server

ANFM1196I Data set: *datasetname* **Member**
** *FCBname* of SYS1.IMAGELIB was not**
** loaded successfully**

Explanation: The specified member of
SYS1.IMAGELIB was not loaded successfully.

System Action: IP PrintWay releases the data set
back to JES and requests that the system hold it.

Operator Response: To attempt to transmit the data
set again, release the data set from hold status.

System Programmer Response: Ensure that the
FCB is in the format created by the IEBIMAGE program.

Source: Infoprint Server

ANFM1197I Data set: *datasetname* **The option FCB**
** conflicts with a PostScript data set**

Explanation: The formatting option Use FCB was
specified for a PostScript data set. These are
incompatible options.

In the message text, *datasetname* is the name of the
data set.

System Action: IP PrintWay attempts to retransmit the
data set named in the message. If this is the final retry,
or if no retries are requested, IP PrintWay retains the
data set on the JES spool for the amount of time
specified for failed transmissions and then deletes the
data set. While the data set is on the JES spool, you
can use Infoprint Server ISPF panels to change routing
information and retransmit the data set. Refer to *z/OS
Infoprint Server Operation and Administration* for more
information.

Operator Response: No response is necessary.

System Programmer Response: Do not send a
PostScript data set to a printer with the Use FCB option
selected in the **Formatting** field of the printer definition.

Source: Infoprint Server

ANFM1198I Data set: *datasetname* **There was an**
** error loading one of the ICONV tables:**
** ICONV return code =** *errno* **document**
** code page =** *coded character set name*
** printer code page =** *coded character set*
** *name***

Explanation: Function **iconv_open** failed due to an
incorrect or unsupported code page specified in the
Printer Inventory. In the message text, *datasetname* is
the name of the data set; *errno* is the error number
returned from **iconv_open**; *coded character set name* is
a code page name specified in the Infoprint Server
Printer Inventory.

System Action: IP PrintWay attempts to retransmit the
data set named in the message. If this is the final retry,
or if no retries are requested, IP PrintWay retains the

data set on the JES spool for the amount of time
specified for failed transmissions and then deletes the
data set. While the data set is on the JES spool, you
can use Infoprint Server ISPF panels to change routing
information and retransmit the data set. Refer to *z/OS
Infoprint Server Operation and Administration* for more
information.

Operator Response: No response is necessary.

System Programmer Response: Ensure that the
coded character set names are valid for your level of
z/OS. For valid names, refer to *z/OS C/C++
Programming Guide*, sections"Code Set Converters
Supplied" and "Universal Coded Character Set
Converters". To correct a job that IP PrintWay is
currently processing, use Infoprint Server ISPF panels
to update the IP PrintWay transmission queue record for
the data set; specify a valid coded character set name
in the translation options section of the queue record.
Also, use Infoprint Server ISPF panels to correct the
coded character set names in the **Document code
page** and **Printer code page** fields in the printer
definition in the Printer Inventory. The document code
page might be specified in the FSS definition for IP
PrintWay in the Printer Inventory instead of in the printer
definition.

Source: Infoprint Server

ANFM1200I Data set: *datasetname* **The LPR**
** RECEIVE A PRINT JOB command**
** failed because a print queue which is**
** not valid was specified, or the LPD**
** accepts jobs only in the well-known**
** range of 721 to 731 Target host:** *target*
** *host* Print queue:** *print queue*

Explanation: The LPR RECEIVE A PRINT JOB
command can fail for a number of different reasons.
Error messages pertaining to the error may have been
issued. See the message log for the related messages.
This may indicate that the print queue in the printer
definition is not correct or the LPD is accepting print
jobs in the well-known port ranges of 721 to 731.

In the message text, *datasetname* is the name of the
data set; *target host* is the target host; *print queue* is the
target print queue.

System Action: IP PrintWay attempts to retransmit the
data set named in the message. If this is the final retry,
or if no retries are requested, IP PrintWay retains the
data set on the JES spool for the amount of time
specified for failed transmissions and then deletes the
data set. While the data set is on the JES spool, you
can use Infoprint Server ISPF panels to change routing
information and retransmit the data set. Refer to *z/OS
Infoprint Server Operation and Administration* for more
information.

Operator Response: No response is necessary.

System Programmer Response: Correct the error

based on the messages in the message log. Verify that the print queue is running on the target host or that the LPD can accept connections outside of port ranges of 721 to 731. If not, deselect the **Restrict ports** LPR option from the printer definition.

Source: Infoprint Server

ANFM1201I   **Data set:** *datasetname* **The data set had an error on receiving an ACK from the LPD after sending all the print data Target host:** *target host* **Print queue:** *print queue*

Explanation: A non-zero return code was received from the LPD after all the data had been sent. Error messages pertaining to the error may have been issued. See the message log for the related messages. The non-zero return code was in response to the null byte sent after all the data was sent to the LPD.

In the message text, *datasetname* is the name of the data set; *target host* is the target host; *print queue* is the target print queue.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the error based on the messages in the message log.

Source: Infoprint Server

ANFM1202I   **Data set:** *datasetname* **The LPR RECEIVE CONTROL FILE command failed Target host:** *target host* **Print queue:** *print queue*

Explanation: The LPD returned a non-zero return code from the RECEIVE CONTROL FILE command. Error messages pertaining to the error may have been issued. See the message log for the related messages.

In the message text, *datasetname* is the name of the data set; *target host* is the target host; *print queue* is the target print queue.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS*

Infoprint Server Operation and Administration for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the error based on the messages in the message log.

ANFM1203I   **Data set:** *datasetname* **The data set had an error on receiving an ACK from the LPD, after sending the control file Target host:** *target host* **Print queue:** *print queue*

Explanation: A non-zero return code was received from the LPD after the control file had been sent. Error messages pertaining to the error may have been issued. See the message log for the related messages. The non-zero return code was in response to the null byte sent after the control file was sent to the LPD.

In the message text, *datasetname* is the name of the data set; *target host* is the target host; *print queue* is the target print queue.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Correct the error based on the messages in the message log.

Source: Infoprint Server

ANFM1204I   **Data set:** *datasetname* **The LPR RECEIVE DATA FILE command failed Target host:** *target host* **Print queue:** *print queue*

Explanation: The LPD returned a non-zero return code from the RECEIVE DATA FILE command. Error messages pertaining to the error may have been issued. Refer to the message log for the related messages.

System Action: No action is necessary.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM1205I   **Data set:** *datasetname* **The LPR RECEIVE DATA FILE OF UNSPECIFIED LENGTH command failed Target host:** *target host* **Print queue:** *print queue*

Explanation: The LPD returned a non-zero return code from the RECEIVE DATA FILE OF UNSPECIFIED LENGTH command. Error messages pertaining to the error may have been issued. Refer to the message log for the related messages.

System Action: No action is necessary.

Operator Response: No response is necessary.

System Programmer Response: Verify that the LPD supports the RECEIVE DATA FILE OF UNSPECIFIED LENGTH command. Not all LPDs support this command.

Source: Infoprint Server

ANFM1206I   **Data set:** *datasetname* **The LPR RECEIVE CONTROL FILE FIRST command failed Target host:** *target host* **Print queue:** *print queue*

Explanation: The LPD returned a non-zero return code from the RECEIVE CONTROL FILE FIRST command. Error messages pertaining to the error may have been issued. Refer to the message log for the related messages.

System Action: IP PrintWay again attempts to transmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change the printer definition's LPR options and routing information, if necessary, and also retransmit the data set if IP PrintWay has completed all retries. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Verify that the LPD will accept the RECEIVE CONTROL FILE FIRST command. Not all LPDs support this command.

Source: Infoprint Server

ANFM1207I   **Data set:** *datasetname* **The LPR RECEIVE A PRINT JOB command failed with a time out condition. This may be caused by an intervention on the printer or a printer problem. Target host:** *target host* **Print queue:** *print queue*

Explanation: The LPD returned a nonzero return code, indicating a time-out condition from the RECEIVE PRINT JOB command. This condition may be caused

by a printer problem such as an intervention condition.

In the message text, *datasetname* is the name of the data set; *target host* is the target host; *print queue* is the target print queue.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: No response is necessary.

System Programmer Response: Check the printer for any abnormal conditions.

Source: Infoprint Server

ANFM1208I   **Data set:** *datasetname* **A failure occurred after** *nnn* **copies were sent**

Explanation: IP PrintWay encountered an error while transmitting multiple copies of the same data set to the printer. In the message text, *datasetname* is the name of the data set, and *nnn* is the number of copies of the data set that were successfully sent to the printer. Another message explains the error.

System Action: IP PrintWay retries the transmission and attempts to transmit the remaining copies. If this is the final retry, or if no retries are requested in the printer definition, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is retained on the JES spool, you can use Infoprint Server ISPF panels to retransmit the original number of copies that were requested to the same printer or to a different printer.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM1605I   **FSS/FSA:** *fss/fsaname* **Virtual storage could not be acquired for tracing so all tracing has been canceled**

Explanation: IP PrintWay could not acquire virtual storage for all required trace control blocks. The tracing has stopped.

In the message text, *fss/fsaname* is the FSS name from the FSS definition or the FSA name.

System Action: All tracing has stopped.

Operator Response: Inform your System Programmer that this error occurred.

System Programmer Response: Increase the REGION size specified in the startup procedure.

Source: Infoprint Server

ANFM1606I FSS/FSA: *fss/fsaname* **Permanent I/O error occurred on trace data set:** *synadaf text*

Explanation: The IP PrintWay SYNAD routine encountered a permanent I/O error while writing to the trace data set.

In the message text, *fss/fsaname* is the FSS name from the FSS definition or FSA name. *synadaf text* is the information returned by SYNADAF.

System Action: Tracing stops.

Operator Response: Inform your System Programmer that this error occurred.

System Programmer Response: Correct the error based on the information provided by the message.

Source: Infoprint Server

ANFM1607I FSS/FSA: *fss/fsaname* **External tracing has started**

Explanation: External trace records are now begin generated.

In the message text, *fss/fsaname* is the FSS name from the FSS definition or FSA name.

System Action: Tracing begins.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM1608I FSS/FSA: *fss/fsaname* **External tracing has stopped**

Explanation: External trace records are no longer being generated.

In the message text, *fss/fsaname* is the FSS name from the FSS definition or FSA name.

System Action: Tracing stops.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM1610I FSS/FSA: *fss/fsaname* **GTF return code = *retcode***

Explanation: Generalized Trace Facility (GTF) has returned a nonzero return code from the GTRACE request. The return codes are as follows:

4	inactive MVS GTF
8	invalid length
C	invalid data address
10	invalid FID
14	invalid EID
18	no GTF buffer space
1C	invalid parameter address
20	data paged out
xx	unknown GTF return code

The above message may be received validly when attempting to start a trace. If the message is received, then GTF was NOT started with the correct USR event IDs. USR=FD1 must be specified to GTF when it is started.

In the message text, *fss/fsaname* is the FSS name from the FSS definition or FSA name. *retcode* is the GTF return code.

System Action: The action depends on the return code. For return codes 18 and 20, tracing continues to GTF. For all other return codes, GTF tracing stops.

Operator Response: No response is necessary.

System Programmer Response: Refer to *z/OS MVS Diagnosis: Tools and Service Aids* for more information on the return codes.

Source: Infoprint Server

ANFM1650I Data set: *datasetname* **The SNA initialization call failed with a return code = *code***

Explanation: An error occurred when IP PrintWay attempted to send a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set; *code* is a code that can help the IBM service representative diagnose the error.

System Action: IP PrintWay attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: This message

indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM1651I   Data set: *datasetname* **The SNA BEGIN DATASET call failed with a return code = *code***

Explanation: An error occurred when IP PrintWay attempted to send a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set; *code* is a code that can help the IBM service representative diagnose the error.

System Action: IP PrintWay attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM1652I   Data set: *datasetname* **The SNA END DATASET call failed with a return code = *code***

Explanation: An error occurred when IP PrintWay attempted to send a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set; *code* is a code that can help the IBM service representative diagnose the error.

System Action: IP PrintWay attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM1653I   Data set: *datasetname* **The SNA TERMINATE PRINTER call failed with a return code = *code***

Explanation: An error occurred when IP PrintWay attempted to send a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set; *code* is a code that can help the IBM service representative diagnose the error.

System Action: IP PrintWay attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM1654I   Data set: *datasetname* **A VTAM error has occcurred:**

**The VTAM request code=*code*
The VTAM feed back code 2=*code*
The VTAM system sense code=*code*
The VTAM RPL return code=*code*
The VTAM LU name=*luname***

Explanation: An error occurred while IP PrintWay was sending a data set to a VTAM-controlled printer.

In the message text, *code* is the code returned by VTAM; *luname* is the logical unit name of the VTAM-controlled printer, which is specified in the printer definition in the Printer Inventory.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: Refer to *z/OS Communications Server: IP and SNA Codes* for information about the VTAM codes.

Source: Infoprint Server

ANFM1655I   Data set: *datasetname* **A VTAM STATE error has occurred: The state is** *state*

Explanation: An error occurred while IP PrintWay was sending a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set; *state* is the state returned by VTAM.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

ANFM1656I   Data set: *datasetname* **A VTAM OPEN error has occurred:**

> **The return code =** *code*
> **The reason code =** *code*

Explanation: A VTAM error occurred while IP PrintWay was trying to send a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set; *code* is the return code or reason code returned by the VTAM OPEN macro.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify your system programmer that this error occurred.

System Programmer Response: Refer to *z/OS Communications Server: IP and SNA Codes* for information about the VTAM return code.

Source: Infoprint Server

ANFM1657I   Data set: *datasetname* **The transmission was successful but was canceled at the printer.**

Explanation: The operator canceled the print job at the printer after all data had been transmitted. In the message text, *datasetname* is the name of the data set.

System Action: IP PrintWay deleted the data set from the JES spool. IP PrintWay processing continues.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM1658I   Data set: *datasetname* **The transmission failed because the timeout timer expired, there is a possible intervention at the printer.**

Explanation: The data set could not be completely transmitted to the printer because the time specified in the **Response timeout** field of the printer definition in the Printer Inventory expired.

In the message text, *datasetname* is the name of the data set at the time of the error.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Correct the problem at the printer.

System Programmer Response: No response is necessary.

Source: Infoprint Server

ANFM1659I   Data set: *datasetname* **The SNA attachment function code at the time of the error:** *functioncode*

Explanation: An associated message identifes the SNA error that occurred.

In the message text, *datasetname* is the name of the data set at the time of the error; *functioncode* is an IP PrintWay code that identifies the IP PrintWay function at the time of the error. This code can help IBM determine the cause of the error.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the

data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Notify the system programmer that this error occurred.

System Programmer Response: See the system programmer response for IP PrintWay message ANF1654I.

Source: Infoprint Server

ANFM1700E Data set: *datasetname* **The** *function* **failed while processing data set** *datasetname* **with the message** *message***.**

Explanation: A print function failed.

In the message text, *function* is the function that failed. *datasetname* is the name of the data set that IP PrintWay was processing at the time of the error. *message* is the message that contains more information about the error.

System Action: See the system action for message *message*.

Operator Response: No response is necessary.

System Programmer Response: See the system programmer response for message *message*.

Source: Infoprint Server

ANFM1704W The destination *printer-url* **does not support the attributes {***attribute-list***}.**

Explanation: IP PrintWay used the Internet Printing Protocol (IPP) to transmit a data set to the indicated printer. The printer, however, does not support all of the IPP job attributes that IP PrintWay sent with the data set. The job submitter might have specified the IPP job attributes, or Infoprint Server might have generated the IPP job attributes from corresponding Infoprint Server job attributes, JCL parameters, or printer attributes specified in the printer definition for the target printer.

In the message text, *printer-url* is the Uniform Resource Locator (URL) of the target printer. *attribute-list* is the list of unsupported IPP job attributes.

System Action: The printer accepted the print request, but ignored the listed IPP job attributes. The output might not print as expected.

Operator Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

IP PrintWay System Completion Code and Abend Reason Codes

The system completion code for abends issued by IP PrintWay and Print Interface is: **09B**. The reason code indicates whether IP PrintWay or Print Interface issued the abend, where:

00000000 – 0000FFFF
Indicates that IP PrintWay issued the abend. See this section for an explanation of these codes.

0000FFFF – 00FFFFFF
Indicates that Print Interface issued the abend. See "Print Interface System Completion Code and Reason Codes" on page 91 for an explanation of these codes.

IP PrintWay issues message ANFM102I with the system completion code and the associated abend reason codes. The following section describes the last two bytes of the abend reason code.

0004

Explanation: The ESTAI call to establish ESTAI failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0008

Explanation: GETMAIN call failed for FSS-related control blocks.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0009

Explanation: GETMAIN for TCP/IP global workarea failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

000A

Explanation: INITAPI failed for TCP/IP sockets interface.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

000B

Explanation: GETMAIN for TCP/IP task area failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

000C

Explanation: A parameter that was not valid or no parameter was passed on the MVS 'start' command.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

000D

Explanation: The GETMAIN call to trace the control blocks below the 16 megabyte line failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0010

Explanation: The FSS level FSI connect request failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay

abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0014

Explanation: An incorrect parameter was specified on the 'start' command.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

001C

Explanation: The ATTACH call for QSCAN failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0020

Explanation: IP PrintWay detected an FSI order that was not valid.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0024

Explanation: The FSI RELDS request failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0028

Explanation: The FSI CHKPT request failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support

Center, or use your electronic link with IBM service for assistance.

002C

Explanation: The FREE request is not valid.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0030

Explanation: The request to disconnect the FSS level FSI failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0034

Explanation: The FREEMAIN macro for the FSS level courier control blocks failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0038

Explanation: The ESTAI macro to cancel ESTAI failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0039

Explanation: The load of module AOXVTM failed. IP PrintWay attempts to load AOXVTM if an APPL ID is specified in the FSS definition for IP PrintWay in the Printer Inventory. Module AOXVTM is part of the Coax Printer Support feature of Infoprint Server Transforms.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Either install the

Coax Printer Support feature or remove the APPL ID statement from the FSS definition. You must restart the IP PrintWay FSS to pick up changes to the FSS definition. For information about how to enable Infoprint Server Transforms and configure IP PrintWay to print to VTAM-controlled printers, refer to *z/OS Infoprint Server Customization*.

0048

Explanation: An incorrect subsystem name was specified on the 'start' command.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0060

Explanation: Call to the data base included an incorrect length field.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0061

Explanation: Call to the data base encountered a bad token.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0062

Explanation: Call to the data base encountered an incorrect length field.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0063

Explanation: Call to the data base encountered a bad token.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0073

Explanation: The DETACH call for the FSA subtask failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0074

Explanation: The Queue Manager component failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0076

Explanation: The ATTACH call for the FSA subtask failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0079

Explanation: SDUMP request for STOP FSS order DUMP option returned an incorrect return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

007A

Explanation: A STOP FSS order with the ABEND and DUMP options was received.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested by the operator; no response is necessary.

007B

Explanation: IP PrintWay received a STOP FSS order with the ABEND and NODUMP options.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested by the operator; no response is necessary.

00D2

Explanation: A failure occurred in SJF FIND when finding the default output SWB.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D3

Explanation: A failure occurred in SJF FIND when finding the output SWB.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D4

Explanation: A failure occurred in the SJF RETRIEVE when obtaining the keyword parameters.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D5

Explanation: An incorrect matrix pointer was received as a parameter.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D6

Explanation: The SJF parameter and the matrix lengths do not match.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D7

Explanation: A failure occurred in module or macro SJFREQ GETSWB.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0100

Explanation: The MODCB macro for initialization of the ACB transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0101

Explanation: The GENCB macro for initialization of transmission queue RPL failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0102

Explanation: The GETMAIN call below the 16 megabyte line for FSA related control blocks failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0103

Explanation: The MODCB macro for sequential read of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0104

Explanation: An I/O error occurred during the sequential read of the transmission queue.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0105

Explanation: The MODCB macro for direct read of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0106

Explanation: The GET call of the transmission-queue record failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0107

Explanation: The ERASE action of the transmission-queue record failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error.

Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0108

Explanation: The FSS-FSA connection failed.

System Action: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0109

Explanation: The CLOSE action of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

010A

Explanation: The ENDREQ call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

010B

Explanation: The OPEN call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

010C

Explanation: The IEFSSREQ macro requesting JES3 level information failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0116

Explanation: The GETMAIN operation failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0118

Explanation: The FSI SEND request (to inform JES that FSA initialization was not successful) failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

011C

Explanation: IP PrintWay detected an incorrect state.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0120

Explanation: The FSI SEND request to reply to the order failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0121

Explanation: The state for the change state request is incorrect.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support

Center, or use your electronic link with IBM service for assistance.

0122

Explanation: The FREEMAIN of storage kept across restarts failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0124

Explanation: The FSI GETDS request to acquire a data set failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0144

Explanation: An error occurred while IP PrintWay was getting a record from JES.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0145

Explanation: The GETMAIN call failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0158

Explanation: "Stop device" order with the ABEND and NODUMP options was received. No SDUMP will be generated.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested by the operator; no response is necessary.

0160

Explanation: An FSA-level FSI disconnect request failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0164

Explanation: FREEMAIN for the FSA-level courier control blocks failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

016C

Explanation: The WTO call failed for an FSA initialization-failure message.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0170

Explanation: A TIMEP macro error occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0184

Explanation: FSI SEND request failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0198

Explanation: "Stop device" order with the ABEND and DUMP options was received.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested by the operator; no response is necessary.

01BC

Explanation: SDUMP request for the "stop device" order with DUMP option returned an invalid return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

01D8

Explanation: "Stop FSA" order with ABEND and DUMP options specified was received.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested by the operator; no response is necessary.

01DC

Explanation: "Stop FSA" order with ABEND and NODUMP options specified was received.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested by the operator; no response is necessary.

01F0

Explanation: SDUMP request for "stop FSA" order with DUMP option returned an invalid return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0201

Explanation: The ATTACH call to the timer subtask failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service

representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0202

Explanation: The MODCB call for initialization of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0203

Explanation: The GENCB call for initialization of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0204

Explanation: The MODCB call for sequential read of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0205

Explanation: An I/O error occurred during the sequential read of the transmission queue.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that you have used the ANFQINIT job to initialize the PrintWay transmission-queue data set before running IP PrintWay. Refer to *z/OS Infoprint Server Customization* for information about how to initialize the data set. Also, ensure that the data in the transmission-queue data set has not been corrupted.

If the transmission-queue data set has been initialized and the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0206

Explanation: The MODCB call for direct read of the transmission queue failed after the data set was posted.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0207

Explanation: The MODCB call for direct read of the transmission queue failed when checking data to post.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0208

Explanation: The PUT call for the transmission queue record failed, locking record.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0209

Explanation: The MODCB call for direct read of transmission queue failed, for cleanup.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020A

Explanation: The GET call to the transmission-queue record failed, for cleanup.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020B

Explanation: The PUT call of the transmission-queue record failed, for clearing leftover lock.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020C

Explanation: The ERASE of the transmission-queue record failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020D

Explanation: The CLOSE of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020E

Explanation: The GET call for direct read of transmission-queue record failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020F

Explanation: The GET call for direct read of transmission-queue record failed—I/O error.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0210

Explanation: The OPEN call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0211

Explanation: The ERASE of the record of transmission queue failed while releasing the data set.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0212

Explanation: The PUT of the record to the transmission queue failed while updating status for requeue.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0213

Explanation: The ENDREQ call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0214

Explanation: Status ECB posted with invalid code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0250

Explanation: A dynamic allocation failure occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A1

Explanation: No record was passed from the FSA.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A2

Explanation: The MODCB call for the initialization of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A3

Explanation: The GENCB for the initialization of the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A4

Explanation: The MODCB call for the record put into the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A5

Explanation: The PUT of the record to transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A6

Explanation: The transmission queue staging module attempted to exit while jobs were still on its staging queue.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A7

Explanation: The CLOSE call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A8

Explanation: The ENDREQ call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A9

Explanation: The OPEN call to the transmission queue failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that the data in the IP PrintWay transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0300

Explanation: The LPR buffer pointer is pointing outside the buffer range.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0301

Explanation: A select logic error has occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0302

Explanation: The record length is too long for the translation buffer.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0303

Explanation: The SWRITE call for hiperspace received a non-zero return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0304

Explanation: The hiperspace buffer and the number of blocks to write to hiperspace do not match.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0305

Explanation: The GET call from hiperspace received a non-zero return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0306

Explanation: The RELEASE of hiperspace extended area received a non-zero return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0307

Explanation: The remaining space in the hiperspace area is not as large as the buffer.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0308

Explanation: Data exists in hiperspace when it all should have been sent.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0309

Explanation: A non-zero return code was received from ANFLGHPR.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0310

Explanation: An invalid DBCS translate option was received by ANFLDBCS.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0311

Explanation: An invalid cc type was received.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0312

Explanation: The length of the cc buffer was exceeded.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0500

Explanation: ANFFSNA detected that an IP PrintWay installation-written exit provided a record that is greater than 32K.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Correct the error in the IP PrintWay Begin Record, Record, or End Record exit. For information about how to write IP PrintWay exits, refer to *z/OS Infoprint Server Customization*.

0502

Explanation: Module ANFFSNA detected an internal timer error.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0502

Explanation: Module ANFSLINE detected an internal timer error.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0506

Explanation: Module ANFSLINE detected that a product is disabled or a service is not available.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0507

Explanation: Module ANFSLINE detected a state error in module AOXVTM.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0508

Explanation: Module ANFFSA detected a state error in module AOXVTM.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0509

Explanation: Module ANFFSNA detected that a product is disabled or a service is not available

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0600

Explanation: The OBTAIN macro for storage failed in module COPSPAWN.S.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0601

Explanation: The ATTACH macro for module AOPSPAWN failed in module COPSPAWN.S.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0602

Explanation: The ATTACH macro for a TCB failed in module COPSPAWN.S.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0603

Explanation: The WAIT macro for a task ECB failed in module COPSPAWN.S.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that module AOPSPAWN is in SYS1.LINKLIB. If module AOPSPAWN is present, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0604

Explanation: The OBTAIN macro for storage failed in module COPOPEN.S.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09B1

Explanation: The error occurred in traversing the CIB data processing command. The CIB contains the information specified in the MODIFY command for IP PrintWay.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09B2

Explanation: The error occurred in traversing the CIB data processing printer name. The CIB contains the information specified in the MODIFY command for IP PrintWay.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09B3

Explanation: The error occurred in traversing the CIB data-processing keyword. The CIB contains the information specified in the MODIFY command for IP PrintWay.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09B4

Explanation: The error occurred in traversing the CIB data-processing parameter. The CIB contains the information specified in the MODIFY command for IP PrintWay.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09B8

Explanation: The printer name in an internal command list has a length of zero. A printer name is required.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09B9

Explanation: An incorrect parameter code was found in the internal command list.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C0

Explanation: The incorrect interface block ID is not 'IPB'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C1

Explanation: The incorrect interface request block ID is not 'IRB'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C2

Explanation: The incorrect queue header ID is not 'QH'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C4

Explanation: The incorrect common control block ID is not 'CCB'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C5

Explanation: The incorrect FSA level control block ID is not 'SAB'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C6

Explanation: The incorrect FSA queue element ID is not 'SAE'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C7

Explanation: The incorrect FSS queue control block ID is not 'SAQ'.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C9

Explanation: The queue request contained in the IRB is not valid.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09CA

Explanation: The request contained in the IRB is not valid.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09D5

Explanation: The MVS DETACH call did not succeed in detaching ANFZCMND.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

09D6

Explanation: The MVS FREEMAIN macro failed to release ANFZCMND storage.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: To determine why FREEMAIN failed or returned unexpected results, refer to your operating system publication that explains system macros. If FREEMAIN reported that the storage requested to be freed is not owned by IP PrintWay, this indicates an IP PrintWay logic error. If it is a logic error, consult your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09D7

Explanation: The ATTACH call failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

09E0

Explanation: No free queue headers.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09F0

Explanation: ANFZFORC received an incorrect command.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09FE

Explanation: The QEDIT macro failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

0D00

Explanation: Invalid parameter list.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D01

Explanation: An element is not available in the new storage block.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D03

Explanation: An element is not available in the initial storage block.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D04

Explanation: An element is not available in the new chain of storage blocks.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D05

Explanation: The GETMAIN module issued a non-zero return code.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0D06

Explanation: Storage is not available in a new pseudo-subpool block.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D07

Explanation: A request for page-fixed storage crosses a 4k bytes boundary.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D08

Explanation: A pseudo-subpool block does not exist.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D09

Explanation: A pseudo-subpool chain does not exist.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D0A

Explanation: A request for page-fixed storage failed. A non-zero return code was received from PGFIXP.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros.

0D0B

Explanation: The GETMAIN call failed when getting storage for a new control block.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay startup procedure.

0D10

Explanation: The type of FREEMAIN request received by IP PrintWay was not valid.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D11

Explanation: An element to be freed was not in use.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D12

Explanation: No pseudo-subpool storage blocks exist.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D13

Explanation: No element storage blocks exist.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D14

Explanation: The correct element storage-block chain could not be located.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D15

Explanation: The element address was not within the bounds of any of the storage blocks.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D16

Explanation: A page free of specified storage failed. A non-zero return code was received from PGFREEP.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D17

Explanation: The storage block chain for the specified pseudo subpool could not be found.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D18

Explanation: A non-zero return code was received from the system FREEMAIN macro.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: To determine why the macro failed or returned unexpected results, refer to your operating system publication that explains system macros. If FREEMAIN reported that the storage requested to be freed is not owned by IP PrintWay, this indicates a IP PrintWay logic error. If it is a logic error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D19

Explanation: The free element counter for the storage-management control block structure indicates how many free elements are available. A free element was expected, but not found, in the storage-management control block structure.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D20

Explanation: The ANFXRETN macro issued this abend code for termination on a particular reason code as specified on the DUMP JCL parameter.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This abend was requested; no response is necessary.

0D21

Explanation: The request for element-type memory exceeds the maximum memory allowed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay

abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0E50

Explanation: The operator terminated the IP PrintWay FSS using the MVS MODIFY FORCE command.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: No response is necessary.

0E90

Explanation: The hiperspace initialization failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0E91

Explanation: The INITAPI call failed. TCP/IP might not be started.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Ensure that TCP/IP has been started. The TCP/IP job name that IP PrintWay uses must match the job name of TCP/IP that is running on the system. You can find the TCP/IP job name that IP PrintWay uses in the IP PrintWay FSS definition. If no IP PrintWay FSS definition exists, or if no TCP/IP name is specified in the FSS definition, IP PrintWay uses the name ″TCPIP″ as the default name.

If you want to change the TCP/IP job name that IP PrintWay uses, use the Infoprint Server ISPF panels to create an PrintWay FSS definition for the IP PrintWay FSS and specify the TCP/IP job name in the **TCP/IP job name** field. Then, restart the IP PrintWay FSS to pick up the change. Refer to *z/OS Infoprint Server Customization* for more information.

If the TCP/IP job names match, this IP PrintWay abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0E92

Explanation: A bad IP address was encountered when trying to connect to TCP/IP.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: Start TCP/IP if it is

| not already started. If TCP/IP is already started, then
| this reason code indicates a possible logic error.
| Contact your service representative in the IBM Support
| Center, or use your electronic link with IBM service for
| assistance.

0E93

Explanation: A state machine error has occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

0E94

Explanation: A select logic error has occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

0E95

Explanation: A TIME macro error has occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

0E96

Explanation: A select logic error has occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

0E97

Explanation: A select logic error has occurred.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

0E98

Explanation: The TCP/IP GETHOSTID call failed.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: If the error condition
persists, contact your service representative in the IBM
Support Center, or use your electronic link with IBM
service for assistance.

0E99

Explanation: A pipi failure has occurred at LOAD.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

0E9A

Explanation: A pipi failure has occurred at
initialization.

System Action: IP PrintWay terminates abnormally.

System Programmer Response: This IP PrintWay
abend reason code indicates a possible logic error.
Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for
assistance.

Chapter 2. Infoprint Server Messages and Codes

This chapter describes the messages that Infoprint Server and the Infoprint Server Transforms can issue to the user. Messages that Infoprint Server ISPF panels displays are not described in this chapter. Use the ISPF help function for more information about these messages.

Message Format

The messages have a message identifier followed by the message text in the following format:

AOP*nnnnt*

AOP Identifies Infoprint Server messages

nnnn The message number

t One-character type code:

Type code	Meaning
E	An error occurred.
I	This is an information message.
S	A severe error occurred.
W	A warning situation occurred.
T	A terminating situation occurred.

Messages

AOPIM000 - AOPIM999

Explanation: These messages are issued by the Infoprint Server ISPF panels. For an explanation, use the online help provided on the ISPF panel.

AOP001E   Printer *printer-name* **is not defined.**

Explanation: The print request requested a printer definition that is not defined in the Infoprint Server Printer Inventory. The printer definition name might have been specified on a command, such as the **lp** or **lpr** command, or in the SUBSYS parameter on the DD statement.

In the message text, *printer-name* is the name of the requested printer definition. `lp1` is the name of the Infoprint Server default printer definition, which is used if no other printer definition name is specified.

System Action: The request was not completed.

User Response: Make sure that you have spelled the name of the printer definition correctly, using the correct upper case and lower case characters. If you specify the name of the printer definition in the SUBSYS parameter of a DD JCL statement, enclose the printer definition name in single quotation marks if it contains lower case characters.

If the name is `lp1`, specify the name of the printer

definition on the print command or in the SUBSYS parameter on the DD JCL statement. If you use the **lp** command, you can instead specify the name of the printer definition in the PRINTER or LPDEST environment variable.

You can run the z/OS UNIX **lpstat -p** command to get a list of available printers in the Printer Inventory. If an appropriate printer definition exists, enter the command or run the job again, specifying that printer; otherwise, ask your administrator to define an appropriate printer.

System Programmer Response: Define a printer in the Printer Inventory if requested.

Source: Infoprint Server

AOP002I   Job *jobid* **has completed processing or has been deleted.**

Explanation: All data sets allocated on the system spool for the print job with job ID *jobid* have completed processing. After this message, the job ID and final status of the data set is reported. The final status can be **completed**, **failed**, or **purged**.

completed	The file has been processed successfully.
failed	Processing has failed.
purged	The file was deleted before printing.

For completed or failed data sets, the files remain on the JES spool for one of the following reasons:

- Your administrator has specified that files should be retained after transmission to a LAN printer or to a print server. The file will be removed from the spool when the retention period expires.
- An error caused the data set to be retained on the spool.

Data sets are removed from the spool for reasons such as:

- The data set finished printing.
- The data set was transmitted to a remote system or printer for printing. In this case, the data set might not yet be finished printing, or a transmission failure might have occurred.
- The operator deleted the data set from the system spool.
- The system programmer offloaded all SYSOUT data sets from the JES spool.

System Action: Processing continues.

User Response: No response is necessary.

Source: Infoprint Server

| **AOP003E**   *objectname*: [*errmsgno*] *errmsgtext*

| **Explanation:** A file error, filter error, or system error
| has occurred. *objectname* is the name of the file, filter
| program, sendmail command, or other object in error.
| *errmsgno errmsgtext* is the message number, if
| available, and the message text generated by a system
| program or by the filter program.

System Action: The request was not completed.

User Response: If you specified *objectname*, ensure that the name is valid. Also, see the description for message *errmsgno*. If you did not specify *objectname*, contact your system programmer for assistance.

| **System Programmer Response:** See the description
| for message *errmsgno*. If an Infoprint Server module
| could not be found, ensure that the LIBPATH
| environment variable is set correctly in the **aopstart**
| EXEC. Refer to *z/OS Infoprint Server Customization* for
| more information about the LIBPATH environment
| variable.

Source: Infoprint Server

Source: Infoprint Server

AOP004E   **A system error occurred during processing.**

Explanation: A system error has occurred during the processing of the request. This message might be followed by message AOP047E, which contains diagnostic information.

System Action: The request was not completed.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP006E   **Job ID:** *jobid* **is not valid.**

Explanation: A request was submitted with a job ID that is not valid.

System Action: The request was not completed.

User Response: Submit the request with a valid job ID.

Source: Infoprint Server

AOP007I   **Job** *jobid* **successfully spooled to** *printer-name***.**

Explanation: Job *jobid* has been allocated on the JES spool.

System Action: The job is allocated on the JES spool.

User Response: No response is necessary.

Source: Infoprint Server

AOP008E   **Option** *option* **argument missing.**

Explanation: A request was submitted with an option that is missing a required argument.

System Action: The request was not completed.

User Response: For the **lp**, **lpstat**, or **cancel** command, view the appropriate man page for the correct options; for other requests, refer to the necessary documentation. Enter the request again with the required argument.

Source: Infoprint Server

AOP009E   **Option:** *″option″* **is not valid.**

Explanation: This message can be issued by most commands and filters. It indicates that the user specified an option character with the command, with the filter-options attribute, or on the filter defined for the printer. The message is usually preceded by the program that issues it. The message is often followed by the usage message for the command or filter.

System Action: The request was not completed.

User Response: Reissue the command with the correct options character. If you are not issuing an incorrect options character, contact the system programmer.

For the **lp**, **lpstat**, or **cancel** command, view the

appropriate man page for the correct options; for other requests, refer to the *z/OS Infoprint Server User's Guide*.

System Programmer Response: Check the printer definition associated with the print job for the cause of the error. If the printer definition did not cause the error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP014E   Job *jobid* **is not found.**

Explanation: The job *jobid* specified in the request was not found.

System Action: The request was not completed.

User Response: Use the **lpstat** command to display job IDs known to the system. Submit the request again with a valid job ID specified.

Source: Infoprint Server

AOP015E   Unknown exception occurred.

Explanation: Print Interface received an exception of unknown value.

System Action: The request was not completed.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP016I   Job *jobid* **on printer** *printer-name* **successfully cancelled.**

Explanation: The cancel request for job *jobid* was successfully completed.

System Action: The job was canceled.

User Response: No response is necessary.

Source: Infoprint Server

AOP017E   No jobs found for user *userid*.

Explanation: A query jobs request (for example: **lpstat -u** *userid*) did not find any jobs for *userid*.

System Action: Processing continues.

User Response: No response is necessary.

Source: Infoprint Server

AOP018E   No jobs found for printer *printer-name*.

Explanation: A query jobs request (for example: **lpstat -p** *printer-name*) did not find any jobs for *printer-name*.

System Action: Processing continues.

User Response: No response is necessary.

Source: Infoprint Server

AOP019E   *attributename* (*attributevalue*) exceeds the maximum value (*maximumvalue*) supported by printer *printer-name*.

Explanation: *attributevalue* specified for *attributename* in the print request (for example: **lp -o** *attributename=attributevalue*) exceeds the maximum value (*maximumvalue*) allowed by the destination printer definition (*printer-name*). For example, the copies attribute in the print request exceeds the maximum copies defined in the printer definition.

System Action: The request was not completed.

User Response: Submit the request again with *attributevalue* less than or equal to *maximumvalue*.

Source: Infoprint Server

AOP020E   Printer *printer-name* **does not support** *attribute-name attribute-value*.

Explanation: The value of an Infoprint Server job attribute was specified correctly; however, the printer definition for the selected printer does not permit that value. For example, the **lp** command might have specified the **duplex=tumble** attribute; however, the printer definition indicates that the printer does not support the **tumble** option.

In the message text:

printer-name   Name of the printer definition that you requested or that Infoprint Server selected to print the file. This printer definition is defined in the Infoprint Server Printer Inventory.

attribute-name   Name of the Infoprint Server job attribute whose value is not supported. If you used z/OS JCL to submit the request, you might have specified a JCL parameter that corresponds to this job attribute. Or, Infoprint Server might have internally specified this job attribute.

attribute-value   The attribute value that is not supported.

If *attribute-name* is "document-format", this means that the printer definition does not accept files with the specified data format. For example, if *attribute-value* is "modca-p", this means that the printer definition does not accept the MO:DCA-P (also called AFP) data

format. If *attribute-value* is "other", Infoprint Server might not have been able to detect the data format of your file. Infoprint Server automatically detected the data format unless you specified the **document-format** job attribute.

System Action: The request was not completed.

User Response: If you specified the *attribute-name* attribute or a corresponding JCL parameter, specify a value for the attribute or JCL parameter that printer definition *printer-name* supports. Contact your administrator to determine, or change, the attribute values that are supported in the printer definition.

If *attribute-name* is "document-format", resubmit your print request to a printer that your administrator says accepts the data format indicated in *attribute-value*. Or, your administrator might be able to specify a data transform in the printer definition to transform your data format to one that the printer supports.

If you think that Infoprint Server did not accurately detect the data format of your data, ensure that your data is not corrupted and ensure that the logical record length (LRECL) specified on the DD statement, if one is used, is correct. In some cases, you might be able to correct the problem by specifying the data format in the Infoprint Server **document-format** job attribute. For example, if you use JCL to print the data set, you can specify the **document-format** attribute in the SUBSYS parameter on the DD statement.

Refer to *z/OS Infoprint Server User's Guide* for information about Infoprint Server job attributes and the SUBSYS JCL parameter.

System Programmer Response: If you want the printer definition to accept the *attribute-value*, use the Infoprint Server ISPF panels to change the supported data formats or other supported values in the printer definition. Refer to *z/OS Infoprint Server Operation and Administration* for information about how to control the validation that Infoprint Server performs.

Source: Infoprint Server

AOP021E   **Output descriptor failed:** *errorparameter*, **return code** *retcode*, **reason code** *reasoncode*.

Explanation: The system OUTADD macro detected an error when Print Interface attempted to add the print job on the JES spool. An error was detected in a parameter in the output descriptor. The message text contains the parameter in error, return code, and reason code from the OUTADD macro.

System Action: The request was not completed.

User Response: Correct the attribute on the print request that corresponds to the *errorparameter*. Or, notify your system programmer that this error occurred.

System Programmer Response: Correct the attribute in the printer definition that corresponds to the

errorparameter. If the error persists, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP022W   *objectname*: *errmsgno errmsgtext*

Explanation: An error has occurred with object name *objectname*. *objectname* is the name of the file, filter program, or other object in error. *errmsgno errmsgtext* is the message number and message text generated by a system program or by the filter program.

System Action: Processing continues.

User Response: If you specified *objectname*, ensure that the name is valid. Also, see the description for message *errmsgno*. If you did not specify *objectname*, contact your system programmer for assistance.

System Programmer Response: See the description for message *errmsgno*.

Source: Infoprint Server

AOP023E   **System job limit exceeded.**

Explanation: A print request was not accepted because the number of job IDs is at the system limit.

System Action: The request was not completed.

User Response: Enter your print request again. If the error persists, notify your system programmer that this error occurred.

System Programmer Response: Reduce the total number of jobs currently in the system.

Source: Infoprint Server

AOP024E   **Print Interface lpd received an unsupported request identifier** *reqid*.

Explanation: The line printer daemon (**lpd**) received a client request that contained a control file with a control code that is not defined by Request For Comments (RFC) 1179. In the message text, *reqid* identifies the control code.

System Action: The request was not completed.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Ensure that the line printer requestor (**lpr**) on the client system creates control files that contain only control codes that are defined by RFC 1179.

Source: Infoprint Server

AOP025E **A write operation failed for the SYSOUT data set.**

Explanation: The print request failed because the attempt to write the SYSOUT data set to the JES spool failed.

System Action: The request was not completed.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Investigate why the write attempt failed. For example, the JES spool might be full, or the size limit of a JES SYSOUT data set might have been exceeded.

Source: Infoprint Server

AOP026E **Job** *jobid* **on printer** *printer-name* **could not be cancelled.**

Explanation: A cancel request for job *jobid* failed, and the job could not be deleted from the JES spool. To cancel a print job, the job cannot already be selected for processing. In the message text, *printer-name* is the name of the printer definition to which the job was directed.

System Action: The request was not completed.

User Response: To cancel a print job printed to a LAN printer in your TCP/IP or SNA network, ask your IP PrintWay operator to cancel it.

Operator Response: To cancel a print job transmitted to a LAN printer using IP PrintWay and already selected for processing, use the Infoprint Server ISPF panels to delete the transmission-queue entry for the data set. Refer to *z/OS Infoprint Server Operation and Administration* for information.

Source: Infoprint Server

AOP027E **This program is not APF-authorized. It must be made APF-authorized.**

Explanation: The program indicated before the message number is not running APF-authorized. This is most likely due to an error during installation.

System Action: The request was not completed.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Do not use NFS to mount the **bin** directory (for example, **/usr/lpp/Printsrv/bin**) that contains Print Interface executables, because this action bypasses APF-authorization.

Source: Infoprint Server

AOP028E *optionsource***:** *attributename* **is ambiguous for:** *attributelist*

Explanation: The attribute *attributename* is an abbreviation for any one of the attributes listed in *attributelist*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Correct the attribute name, specifying enough characters in the attribute name to make the name unique. Then enter your print request again.

Source: Infoprint Server

AOP029E **SYSOUT data set allocation failed. JES may be down-level.**

Explanation: The print request was not allocated on the JES spool. This might have occurred because JES is not at the required level.

System Action: The request was not completed.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Ensure that JES is at required level, as documented in *z/OS Infoprint Server Customization*. If JES is at the required level, investigate why the SYSOUT data set allocation failed. For example, the JES spool might be full, or the system might have exceeded the maximum number of SYSOUT data sets allowed on the spool.

Source: Infoprint Server

AOP030E **SYSOUT data set allocation failed. Confirm** *printdestination***.**

Explanation: An error occurred during allocation of an output data set on the JES spool. In the message text, *printdestination* is either the destination name or the destination node specified in the printer definition for the printer in the Printer Inventory.

System Action: The request was not completed.

User Response: Notify your system programmer or administrator that this error occurred. After the error is corrected, enter your print request again.

System Programmer Response: Change *printdestination* in the printer definition to a valid value. You can use Infoprint Server ISPF panels to list all printer definitions in the Printer Inventory with the value in error. If *printdestination* is a valid value, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP032E   *optionsource*: **The attribute name** *attributename* **is not valid.**

Explanation: The attribute named *attributename* is not valid.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with a valid attribute assignment.

Source: Infoprint Server

AOP033E   *optionsource*: **Unmatched** *stringvalue*.

Explanation: Print Interface expected a matching value for *stringvalue* but did not find one.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with a matching value for *stringvalue*.

Source: Infoprint Server

AOP034E   *optionsource*: **The value** *stringvalue* **is not valid.**

Explanation: The value *stringvalue* is not valid for *optionsource*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file. If *optionsource* is `printer-uri`, the Uniform Resource Indicator (URI) specified in the printer definition is not valid.

System Action: The request was not completed.

User Response: Correct the error and submit the request.

Source: Infoprint Server

AOP035E   *optionsource*: **Expecting** *stringvalue1* **but found** *stringvalue2*.

Explanation: Print Interface expected to find *stringvalue1* in this context, but instead found *stringvalue2*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct value. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP036E   *optionsource*: *stringvalue* **is shorter than the minimum length of** *minimumlength*.

Explanation: *stringvalue* is shorter than the acceptable minimum length of *minimumlength*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct value for *stringvalue*. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP037E   *optionsource*: *stringvalue* **is longer than the maximum length of** *maximumlength*.

Explanation: *stringvalue* is longer than the acceptable maximum length *maximumlength*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct value for *stringvalue*. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP038E   *optionsource*: *value1* **is less than the minimum value of** *minimumvalue*.

Explanation: *value1* is less than the acceptable minimum value *minimumvalue*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct value for *value1*. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP039E   *optionsource*: *value1* **exceeds the maximum value of** *maximumvalue*.

Explanation: *value1* exceeds the acceptable maximum value *maximumvalue*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct value for *value1*. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP040E   *optionsource*: **The minimum number of values is** *minimumnum*.

Explanation: A request was issued with less than the minimum number of values *minimumnum*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct number of values. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP041E   *optionsource*: **The maximum number of values is** *maximumnum*.

Explanation: A request was issued with more than the maximum number of values *maximumnum*.

In the message text, *optionsource* identifies where the error occurred. For example, if *optionsource* is "-o", the error occurred in the **-o** option. If *optionsource* is the name of an attributes file, the error occurred in the named attributes file.

System Action: The request was not completed.

User Response: Submit the request again with the correct number of values. If *optionsource* is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

System Programmer Response: If the error occurred in an Infoprint Server configuration file, correct the error.

Source: Infoprint Server

AOP042E   *source file*: **exceeds the maximum value (***maximumvalue***) allowed by printer** *printer-name*.

Explanation: The size of the job submitted for printing, including all files in the job and all copies, exceeds the maximum size print job allowed for the selected printer. The administrator defines the maximum size allowed in the printer definition in the Printer Inventory.

In the message text, *source file* is the name of the document which is too large to print; *maximumvalue* is the number of bytes allowed in the printer definition, and *printer-name* is the name of the selected printer.

System Action: The print request was not completed.

User Response: Make the print job smaller or select another printer, and submit your print request again. Or ask your administrator to increase the maximum job size allowed for this printer in the printer definition.

System Programmer Response: To increase the size limit for jobs submitted to this printer, use Infoprint Server ISPF panels to edit the printer definition. In the printer definition, specify the maximum number of bytes allowed.

Source: Infoprint Server

AOP043E   **The nesting value for attributes files has been exceeded.**

Explanation: The attributes file references an attributes file that also references an attributes file. The number of these nested attributes files has exceeded 16 files.

System Action: The print request was not completed.

User Response: Change the attributes files to limit the number of nested attributes files to 16, and submit your print request again.

Source: Infoprint Server

AOP044I   **Shutdown complete.**

Explanation: The daemon named before the message number has shut down.

System Action: The named daemon has shut down.

Operator Response: To restart the named daemon, use the daemon's start command (such as, **aopstart**).

Source: Infoprint Server

AOP045E   *attributename1* **required when** *attributename2* **specified.**

Explanation: When you specify attribute *attributename2* on the **lp** command, you must also specify attribute *attributename1*.

System Action: The print request was not completed.

User Response: Correct the attributes, and submit the print request again.

Source: Infoprint Server

AOP046E   **You are not permitted to cancel job** *jobid*.

Explanation: You are not the same user who submitted the job.

System Action: The job was not canceled.

User Response: To cancel a print job submitted by another user, contact your system operator.

Source: Infoprint Server

AOP047E   *exception-information*

Explanation: This message is issued in conjunction with message AOP004E and contains diagnostic information that might be helpful in solving the problem.

System Action: The request is not completed.

User Response: Contact your system programmer.

System Programmer Response: Use the information in this message to find the source of the problem. If you cannot identify the cause of the problem, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Following is one possible message text:

```
aoplpd: AOP047E Bind() failed in TCPListener::
TCPListener(const IPAddress&) at
./src/tcpconnect.cpp 98:
EDC8115I Address already in use. errno2=0x744c7247
```

This message text indicates that the Infoprint Server LPD (**aoplpd**) attempted to use a port that is already used by another process. The process could be another instance of **aoplpd** that was started earlier, the standard MVS LPD (shipped with TCP/IP), or another process if the port is not 515. Check the following:

1. From a UNIX System Services shell, logged in as root or superuser (UID=0), enter the **ps** command to determine whether an **aoplpd** process is already running:

   ```
   ps -ef | grep aoplpd
   ```

   If so, enter the **aopstop** or **kill** command to end this process:

   ```
   aopstop -d lpd
   kill process_id
   ```

   Then enter the **aopstart** command to restart **aoplpd**.

2. If the **ps** command does not show **aoplpd** already running, enter the following commands to determine if any other process is listening at the same port:

   ```
   onetstat | grep port
   ```

   where *port* is the port number specified in the **lpd-port-number** attribute in the **aopd.conf** file. If the result shows the port in a Listen state, determine which process is using the port and do one of the following:

   - Stop the process using the port.
   - Change the port number at which **aoplpd** listens in the **lpd-port-number** attribute in the **aopd.conf** file.
   - Configure TCP/IP with two stacks so that the MVS LPD and **aoplpd** can both listen at port 515.

3. Check the TCP/IP configuration file, *hlq*.PROFILE.TCPIP, to determine whether the port is reserved. Port numbers specified in the PORT statement are reserved. If you want **aoplpd** to listen at port 515, comment out the line in *hlq*.PROFILE.TCPIP that lists port 515.

For more information about how to customize TCP/IP and the Print Interface LPD, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

AOP048E   *hostname*: **Unknown host.**

Explanation: The host *hostname* was not resolved using the **gethostbyname()** function.

System Action: The print request is not completed.

User Response: If *hostname* was specified in any options in your print request, verify that *hostname* is the correct host name. If *hostname* was not specified, contact the system programmer.

System Programmer Response: Verify that the DNS server is accessible and functioning from z/OS and that there is an entry for host *hostname*.

Source: Infoprint Server

AOP049E Insufficient CSA/ECSA storage available. *number* **bytes required.**

Explanation: There was no subpool 241 storage available to the program.

System Action: Infoprint Server does not initialize.

System Programmer Response: If all programs are consuming normal amounts of common storage, then increase the storage amount specified in SYS1.PARMLIB (IEASYS*xx*) and re-run initial program load (IPL) at a convenient time. Infoprint Server common storage area (CSA) requirements depend upon system load but are generally modest; 64 K of ECSA (extended common storage area) should be more than enough.

Source: Infoprint Server

AOP050E Cannot connect to inventory *inventory*.

Explanation: The Printer Inventory *inventory* is not currently active.

System Action: The print request is not completed.

User Response: Wait until the Printer Inventory is active, or contact your system programmer.

System Programmer Response: Start the Printer Inventory using the command **aopstart** or the AOPSTART procedure.

Source: Infoprint Server

AOP051I All daemons started successfully.

Explanation: All daemons started successfully. This message is for information only.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP052E A filter name must be supplied.

Explanation: A filter name must be specified with the filter command. No filter name was specified.

System Action: The print request is not completed.

User Response: If you are using the filter command directly, specify a filter name. For more information, see **cfilter.h** and **cfilter.c** in the **/usr/lpp/Printsrv/samples/** directory. If the message is coming from an

installation-supplied program, then contact the system programmer.

System Programmer Response: If you are using the filter command directly, specify a filter name. Use the filter man pages for more information. If the message is coming from an installation-supplied program, ensure the installation-supplied program is generating a filter name with a filter command.

Source: Infoprint Server

AOP053E *program_name* exited with status *status*.

Explanation: The specified program ended with a non-zero status.

System Action: Processing continues.

User Response: The current output request may be incomplete. Verify the request and re-issue it. If the problem recurs, contact the system programmer.

System Programmer Response: If the error was issued by the transform daemon (AOPXFD), and the program named is an IBM-supplied transformer, then contact the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, treat the problem as originating with *program_name*.

Source: Infoprint Server

AOP054E *program-name* was terminated because of signal *signal_number*.

Explanation: The specified program was ended because it received the specified signal.

System Action: The named program terminates.

User Response: The current output request may be incomplete. Verify the request and re-issue it. If the problem recurs, contact the system programmer.

System Programmer Response: If no user issued the kill command against the program, and if the error was issued by the transform daemon (AOPXFD), and if the program named is an IBM-supplied transformer, then contact the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, treat the problem as originating with *program_name*.

Source: Infoprint Server

AOP055E A protocol error occurred: *message* | *data*.

Explanation: If this message was issued within message AOP003E, then *message* was received and was not valid.

If this message is in the IP PrintWay message log, then an error occurred in the HTTP protocol when IP PrintWay attempted to transmit data to a printer using the Internet Printing Protocol (IPP).

In the message text, *message* is a message; *data* is the HTTP protocol data that has an error.

System Action: The request is terminated. If this message is in the IP PrintWay message log, then IP PrintWay takes the following action.

IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

User Response: Notify your system programmer.

System Programmer Response: This message is either contained within AOP003E or was written to the IP PrintWay message log. If message AOP003E indicates that the source of the error is an IBM-supplied program, or if the message is in the IP PrintWay message log, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, treat the problem as originating with the named source.

Source: Infoprint Server

AOP056E   *filename* **was not spooled.**

Explanation: The specified filename was not spooled. Messages that follow indicate the reason.

System Action: The request is terminated.

User Response: See other messages issued in conjunction with this one.

System Programmer Response: See other messages issued in conjunction with this one.

Source: Infoprint Server

AOP057E   *attribute_name1* **also requires** *attribute_name2*.

Explanation: The first specified attribute requires that a value also be supplied for the second specified attribute.

System Action: The request is terminated.

User Response: Supply a value for *attribute_name2*.

System Programmer Response: Ensure the user supplies a value for *attribute_name2*.

Source: Infoprint Server

AOP058E   *attribute_spec* **cannot be specified with** *attribute_name*.

Explanation: The specified attribute specification is not valid for the specified attribute.

System Action: The request is terminated.

User Response: Either do not set *attribute_spec* for this attribute, or do not supply a value for *attribute_name*.

Source: Infoprint Server

AOP059E   **When** *attribute_name1* **is** *value*, **then** *attribute_name2* **is required.**

Explanation: The specified second attribute must be set if the first attribute has the value indicated.

System Action: The request is terminated.

User Response: Either do not specify *value* for *attribute_name1*, or supply a value for *attribute_name2*.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP060E   **When** *attribute_name1* **is** *value*, **then** *attribute_name2* **cannot be specified.**

Explanation: A value of *value* for *attribute_name1* precludes specifying *attribute_name2*.

System Action: The request is terminated.

User Response: Either do not specify *value* for *attribute_name1*, or do not supply a value for *attribute_name2*.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP061W   *object_class object_name* **is not found.**

Explanation: This message is issued by the Print Inventory Definition Utility (PIDU). The indicated object was not found in the Printer Inventory.

System Action: The request is terminated.

User Response: Check that you requested the right printer for your print job. If not, re-enter the request with the right printer. If so, contact your system programmer.

System Programmer Response: If the indicated object is a printer definition, then either create the printer definition in the Printer Inventory, or re-enter the request with a different printer definition. If the indicated object is part of a printer definition, change the printer definition to include a valid object.

Source: Infoprint Server

AOP062I   *object_class object_name* **was created.**

Explanation: This informational message is issued by the Print Inventory Definition Utility (PIDU). The indicated object was created in the Printer Inventory as requested.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP063I   *object_class object_name* **was replaced.**

Explanation: This informational message is issued by the Print Inventory Definition Utility (PIDU). The indicated object was replaced in the Printer Inventory as requested.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP064I   *object_class object_name* **was deleted.**

Explanation: This informational message is issued by the Print Inventory Definition Utility (PIDU). The indicated object was deleted from the Printer Inventory as requested.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP065I   *count* **definitions were exported to** *filename*.

Explanation: The specified number of printer definitions were exported to filename *filename*.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP066E   *attribute_name* **is not supported in a predicate.**

Explanation: The type of this attribute precludes its use in predicates.

System Action: The request is terminated.

User Response: Specify a simply typed attribute name.

System Programmer Response: Specify a simply typed attribute name.

Source: Infoprint Server

AOP067E   **Connection to the host SNMP agent failed, retcode =** *retcode***.**

Explanation: The Infoprint Server SNMP printer subagent (AOPSNMPD) failed to connect to the z/OS Communications Server SNMP agent (OSNMPD). Common causes may be:

- OSNMPD may not be active. Refer to *z/OS Communications Server: IP Configuration Reference* for instructions on starting OSNMPD. This error returns return code –2.
- The default community name (**public**) has been overridden in either the OSNMPD daemon or the AOPSNMPD daemon, creating a mismatch. This error returns return code –2.
- Another instance of the AOPSNMPD daemon is active.

If the return code is greater than –90, its values will be documented in the header file /usr/lpp/tcpip/snmp/include/snmp_dpi.h

Other return code values are:

–90   failed on mkDPIopen

–91   failed on pDPIpacket

–92   no response to DPI-register

System Action: The AOPSNMPD daemon is not started.

System Programmer Response: Verify that the OSNMPD daemon is active and available and that the community name matches if it has been overridden. Otherwise contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance. If possible, recreate the error with the Infoprint Server trace active. For more information on the Infoprint Server trace facility, see "Tracing Infoprint Server" on page 213.

Operator Response: Contact your system programmer.

Source: Infoprint Server

AOP068W   *filename*: **contains duplicate entry "*transform_class*."**

Explanation: The transform class *transform_class* appears multiple times in *filename*.

System Action:

User Response: No response is necessary.

System Programmer Response: Ensure that the transform class specified appears only once.

Source: Infoprint Server

AOP069E   **Connection to transform class (*transform_class*) failed.**

Explanation: Some print data requires transformation from one data format to another, such as from PCL to AFP™, from PostScript to AFP or from PDF to AFP. For such data sets, Print Interface sends the print data to a transform process for conversion prior to writing the data to the JES spool. This error message indicates that communication with the transform process was either never established or failed before the transform completed.

In the message text, *transform_class* is the name of the transform (such as, pcl2afp) concatenated with the class specified in the **-c** filter option (such as, letter_240). For example, `pcl2afp_letter_240`.

System Action: The transform request was not completed.

User Response: Submit the request with a valid **-c** filter option. If the **-c** option is valid, notify your administrator.

System Programmer Response: Ensure that a valid transform class is specified in the **-c** filter option in the printer definition. The transform class must be defined in the transform configuration file, **aopxfd.conf**. If you change the configuration file, stop and restart the Infoprint Server Transform Manager daemon to pick up the changes.

Also, ensure that you have installed the requested transform and have correctly specified the name of the transform daemon in the transform configuration file. The name of the transform is the first part of the class_name (for example, afp2pcl.) If the transform daemon for the transform (for example, afp2pcld) is not installed, you also receive message EDC5129I on the console.

View the **/var/Printsrv/xfd/***transform_class***.#.stderr** file for an indication of the cause of the transform failure.

If the problem persists, contact your IBM service representative.

Source: Infoprint Server

AOP070E   **A timeout occurred in** *resource_id*.

Explanation: The request failed because it exceeded a time limit associated with the resource identified in the message.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Increase the time limit associated with the named resource.

Source: Infoprint Server

AOP071E   **Expected operand** *operand_id* **is missing.**

Explanation: A request was submitted without a required operand, which is identified in the message.

System Action: The request was not completed.

User Response: If you entered the command from the command line, submit the request with the required operand. If you did not enter the command missing the operand, notify your administrator.

System Programmer Response: Add the required operand to the printer definition.

Source: Infoprint Server

AOP072E   **Use of this product is not enabled.**

Explanation: This product is not enabled for use. It must be enabled in SYS1.PARMLIB.

System Action: The program terminates.

System Programmer Response: Enable the product in the IFAPRD*xx* member of SYS1.PARMLIB. For information, refer to *z/OS and z/OS.e Planning for Installation*.

Source: Infoprint Server

AOP073E   *inventory*: **function** *function_number* **failed with return code** *retcode* **reason code** *reasoncode*.

Explanation: The Printer Inventory function *function_number* failed for the Printer Inventory indicated in *inventory*.

System Action: The request terminates.

User Response: Contact your system programmer.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP074E   Invalid API function call, *function call*.
Job has not been created.

Explanation: This message involves the application programming interface (API) library that is shipped with Infoprint Server. The API allows customers to develop their own printing applications.

Message AOP074E is issued when a programmer uses an API function in error; for example, calling WritePrintFile() or ClosePrintFile() before calling CreatePrintFile(). A print file must be created before it can be written to or closed.

System Action: The API does not run, and no print file is created.

User Response: If you are the application programmer using the API, rewrite the code to eliminate the error. If you are not the application programmer, notify your system programmer of this error.

System Programmer Response: Have the application developer rewrite the code that uses the API to eliminate the error.

Source: Infoprint Server

AOP075I   Daemon *daemon_name* **was started successfully.**

Explanation: The named daemon was started successfully.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP076E   The start of daemon *daemon_name* **failed.**

Explanation: The named daemon could not be started.

System Action: The request terminates.

User Response: Contact your system programmer.

System Programmer Response: Messages that indicate the reason for the failure will follow on the terminal where the daemon was started or on the console log.

Source: Infoprint Server

AOP077I   Daemon *daemon_name* **is already started.**

Explanation: The named daemon is already active and cannot be started again.

System Action: The request to start the daemon

again has no effect on the system.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP078E   Daemon *daemon_name* **is not running.**

Explanation: An attempt was made to stop a daemon that is not running.

System Action: The request has no effect on the system.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP079I   A shutdown of daemon *daemon_name* **has been initiated.**

Explanation: The system has begun termination of the named daemon. The termination is not complete until message AOP044I, which indicates daemon termination, is issued.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP080E   Unexpected signal *signal_number* **received.**

Explanation: A daemon received an unexpected signal it cannot process.

System Action: The daemon terminates abnormally.

User Response: Notify your system programmer.

System Programmer Response: Restart the daemon.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP081E   Start of Java® virtual machine failed with return code *retcode*.

Explanation: This message is issued when the Internet Printing Protocol (IPP) server component of Print Interface (AOPIPPD) fails to start the Java virtual machine. Because the IPP server uses Java to process IPP operations, the server must create a Java environment (i.e., the Java virtual machine) to use Java services. The two most common reasons for failure in starting the Java virtual machine are

- The Java library **libjava.a** is not APF-authorized. This library must be APF-authorized before continuing.
- The user starting AOPIPPD has installed Java in a non-standard place on HFS and has not updated the JAVA_HOME environment variable.

System Action: Print Interface does not process the print data set.

User Response: Contact the system programmer.

System Programmer Response: Ensure that the Java library (**libjava.a**) is APF-authorized. If Java was installed in a non-standard place on HFS, ensure the JAVA_HOME environment variable is updated to identify the location. Have the user resubmit the print job.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOP082E   You are not authorized to run this utility.

Explanation: The user does not have correct authority to run the utility.

System Action: The utility terminates.

User Response: Notify your system programmer.

System Programmer Response: If the user is allowed to run the utility, then they should be permitted to FACILITY AOPADMIN. For more information, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

AOP083E   A *object_class* **named** *object_name* **already exists.**

Explanation: An attempt was made to create an inventory object which would conflict with an existing object.

System Action: The new inventory object is not created.

User Response: If you need the new object, give it a class and name that do not conflict with an existing object.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP084E   A *object_class object_name* **is already defined with** *attribute_spec***.**

Explanation: The object of class *object_class* named *object_name* already exists in the inventory, and its *attribute_spec* prevents the definition of the current object.

System Action: The new object is not created.

User Response: Choose values for the attribute that do not conflict with those of the named *object_class object_name*.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP085E   Inclusion of *object_class1 object_name1* **failed for** *object_class2 object_name2***.**

Explanation: While building the object of type *object_class2* named *object_name2* from the Printer Inventory, the object of type *object_class1* named *object_name1* was not found. The object will be treated as not found until *object_class1 object_name1* is defined.

System Action: The request which tried to process *object_class2* named *object_name2* fails.

User Response: If you want to create a new object which contains *object_class1 object_name1* within its definition, you must first create *object_class1 object_name1*.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP086I   GTF tracing started.

Explanation: Printer Inventory interface GTF tracing was started.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP087I   GTF tracing stopped.

Explanation: Printer Inventory interface GTF tracing has stopped.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP088I   *object_class object_name* was renamed to *new_name***.**

Explanation: As requested, object *object_class object_name* was renamed as indicated.

System Action: Processing continues.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP089E   *address*: **The connection was lost.**

Explanation: An active connection to the specified address was unexpectedly terminated due to a network failure, a software error, or user action.

System Action: Activity on the connection is terminated.

User Response: Retry the request which caused the error. If errors persist, notify your system programmer.

System Programmer Response: Use network problem determination procedures to determine if the failure is network-related or is caused by the machine at *address*. If the problem is not network-related, and the software causing the message is IBM-supplied, or if the problem appears to be caused by the Infoprint Server component issuing the message, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, contact the vendor of the software causing the message.

Source: Infoprint Server

AOP090E   *attributename*: **A value is required.**

Explanation: A value is required for *attributename* to complete the request.

System Action: The request is terminated.

User Response: Supply a value for *attributename* and reissue the request.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP091I   **Connected to** *name*.

Explanation: The utility has connected to the inventory or host *name*.

System Action: None.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP093E   **The token** *token* **is invalid.**

Explanation: The token passed to the API is invalid.

User Response: Notify the applications or systems programmer.

System Programmer Response: The token is dumped in hex. Look for a token being used before it is initialized (for example, with CreatePrintFile()) or after it has been invalidated (for example, with AbortPrintFile()).

Source: Infoprint Server

AOP094E   *functionname*:*nnnnnnnnnn* **bytes of buffer storage were required,** *nnnnnnnnnn* **were provided.**

Explanation: The buffer provided by the caller to an API function is not large enough to satisfy the request.

User Response: Notify the applications or systems programmer.

System Programmer Response: Use the BufferSizeRequired() function to determine the size of the buffer required and change the program using the API to supply a buffer at least that size. Consider modifying the program so that it checks for ErrorNumber() == AOP_BUFFER_OVERFLOW and dynamically allocates the buffer size required.

Source: Infoprint Server

AOP095E   **API Initialization failed.**

Explanation: The API could not be initialized and there was not enough storage to describe the reason better.

User Response: Increase the amount of storage available for the application or notify the applications or systems programmer.

System Programmer Response: Increase the amount of storage available for the application.

Source: Infoprint Server

AOP099E   **The URI scheme** *scheme* **is not supported.**

Explanation: The Uniform Resource Indicator (URI) for the printer, which is specified in the printer definition for the target printer, is not valid. Start the URI with a valid scheme, for example `http:` or `ipp:`.

In the message text, *scheme* is the first part of the URI value as specifed in the printer defintion.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you

can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

System Programmer Response: Use the Infoprint Server ISPF panels to correct the value specified in the **URL** field of the printer definition for the target printer. The **URL** field is displayed on the URL Protocol panel.

Source: Infoprint Server

AOP100E   The target *printer-uri* **responded with** *scheme* **status** *code***.**

Explanation: IP PrintWay used the Internet Printing Protocol (IPP) to send a data set to the target printer, and the printer reported an error.

In the message text, *printer-uri* is the Uniform Resource Indicator (URI) of the target printer as specified in the printer definition. *scheme* is either HTTP or IPP. *code* is either the message or code returned by the target printer.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

System Programmer Response: Look up the status codes in either RFC 2068 for HTTP or RFC 2566 for IPP.

Source: Infoprint Server

AOP101E   Internet Printing Protocol (IPP) server failed to establish server socket at port *portnumber* [*message*] **.**

Explanation: The Infoprint Server IPP server (daemon **aopippd**) encountered an error when it attempted to establish a server socket connection at the requested port.

In the message text, *portnumber* is the port number at which the IPP server attempted to establish a connection. This port number is specified in the **ipp-port-number** field in the Infoprint Server configuration file, **aopd.conf**. The default port is 631. *message* is a message that contains additional error information.

System Action: The IPP server cannot accept any print requests from remote IPP clients.

System Programmer Response: Verify that the port number in the message is correct and available to the IPP server. Look up *message* for more information

about the error. If *message* indicates that the port number (that is, the address) is already in use, either stop the other process that is using the port number or specify another port for the IPP server in the **ipp-port-number** field in the Infoprint Server configuration file, **aopd.conf**. Refer to *z/OS Infoprint Server Customization* for information about the configuration file.

After correcting the problem, you must stop and restart the IPP server so that the IPP server attempts to establish a server socket connection again. You can use the following commands to stop and restart the IPP server:

```
aopstop -d ippd
aopstart
```

Source: Infoprint Server

AOP102E   The Infoprint Server LPD (AOPLPD) failed to read an LPD command.

Explanation: The Infoprint Server LPD (daemon **aoplpd**) failed when it attempted to read an LPD command.

System Action: The Infoprint Server LPD did not allocate an output data set on the JES spool. Processing continues.

User Response: Resubmit the print request.

System Programmer Response: If this message occurs often, it might indicate a network problem between the submitting client and the Infoprint Server host system. Investigate and correct the source of the problem.

Source: Infoprint Server

AOP103E   DEST, CLASS, and FORMS printer selection is not permitted in the printer named DLFTNTRY

Explanation: You must not select the **Use DEST, CLASS, and FORMS for IP PrintWay printer selection** option in the printer definition named DFLTNTRY. IP PrintWay uses the printer definition named DFLTNTRY only to obtain default values for certain attributes when it prints a data set submitted with the DEST=IP parameter and no FSSDATA=printer parameter on an OUTPUT JCL statement.

System Action: Infoprint Server did not create the printer definition in its Printer Inventory.

User Response: If you used ISPF panels to create the printer definition, either deselect the **Use DEST, CLASS, and FORMS for IP PrintWay printer selection** field in the printer definition or change the name of the printer definition, and save the printer definition again. If you used the **pidu** command to create the printer definition, either remove the **dcf-routing** attribute or change the name of the printer

definition, and enter the command again.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP104E   **Resubmit for filtering is not permitted in the printer named DLFTNTRY**

Explanation: You must not select the **Resubmit for filtering** option in the printer definition named DFLTNTRY. IP PrintWay uses the printer definition named DFLTNTRY only to obtain default values for certain attributes when it prints a data set submitted with the DEST=IP parameter and no FSSDATA=printer parameter on an OUTPUT JCL statement.

System Action: Infoprint Server did not create the printer definition in its Printer Inventory.

User Response: If you used ISPF panels to create the printer definition, either deselect the **Resubmit for filtering** field in the printer definition or change the name of the printer definition, and save the printer definition again. If you used the **pidu** command to create the printer definition, either remove the **resubmit-for-filtering** attribute or change the name of the printer definition, and enter the command again.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP105E   *printer-uri* **The response-timeout was exceeded; the printer may require intervention.**

Explanation: The data set could not be completely transmitted to the printer because the time specified in the **Response timeout** field of the printer definition in the Printer Inventory expired.

In the message text, *printer-uri* is the Uniform Resource Indicator (URI) for the printer.

System Action: IP PrintWay attempts to retransmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change routing information and retransmit the data set. Refer to *z/OS Infoprint Server Operation and Administration* for more information.

Operator Response: Correct the problem at the printer.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP106E   **Transform** *transform_class* **connection refused. [***errmsgno***]** *errmsgtxt*

Explanation: The Infoprint Server Transform Manager attempted to connect to a transform daemon. The connection attempt failed probably due to a failure that occurred during initialization of the transform daemon.

In the message text:

transform_class   The name of the transform concatenated with the transform class that was requested in the **-c** option.

errmsgno errmsgtext
              The message number, if available, and the message text generated by a system program.

System Action: The transform was not performed.

User Response: Notify your system programmer.

System Programmer Response: View the **/var/Printsrv/xfd/***transform_class***#.stderr** file for the cause of the failure to initialize the transform daemon. A probable error is that an AFP resource library is not specified correctly in the transform configuration file, **aopxfd.conf**. If you change the transform configuration file, stop and restart the Infoprint Server Transform Manager daemon to pick up the changes.

Source: Infoprint Server

AOP107E   **Subsystem** *function* **request failed - insufficient resources.**

Explanation: The Print Interface subsystem did not have sufficient resources to process a data set that was submitted to Infoprint Server using the SUBSYS JCL parameter on a DD statement. One possible reason for this error is that the job step contained a large number of DD JCL statements.

In the message text:

function
              The name of the function that the subsystem was performing when the error occurred. Possible values are: allocate, open, close, put, and unallocate.

System Action: The Print Interface subsystem does not allocate output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Reduce the number of resources required by the job step, and rerun the job. For example, decrease the number of DD JCL statements.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOP108E   Subsystem *function* **request failed - system error, reason =** *reason code*

Explanation: A z/OS system error occurred while Infoprint Server was processing a data set that was submitted to Infoprint Server with the SUBSYS JCL parameter on the DD statement.

In the message text:

function
> The name of the function that Infoprint Server was performing when the error occurred. Possible values are: allocate, open, close, put, and unallocate.

reason code
> A code that indicates the reason for the error, in the format: 00*xxyyzz*.

System Action: If the *function* is allocate, open, close, or put, the Print Interface subsystem does not allocate output data sets on the JES spool for any data sets in the job step. If the *function* is unallocate, the Print Interface subsystem might have allocated an output data set on the JES spool for this data set.

Operator Response: Notify your system programmer that this error occurred.

User Response: Resubmit the job after the error is corrected.

System Programmer Response: If the *function* is allocate, open, close, or unallocate, save the associated dump in case you need to contact your IBM service representative. Follow the system programmer response for the reason code in "Print Interface System Completion Code and Reason Codes" on page 91.

Source: Infoprint Server

AOP109E   Subsystem disconnect request received - step cancelled.

Explanation: Either the operator stopped the Print Interface subsystem or the Print Interface subsystem ended abnormally.

System Action: The Print Interface subsystem does not allocate any output data sets on the JES spool for this job step.

Operator Response: If you did not stop the Print Interface subsystem, notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart Infoprint Server daemons after the problem is corrected.

User Response: Notify your operator that this error occurred. Resubmit the job after the operator restarts the Print Interface subsystem.

System Programmer Response: If the operator did not stop the Print Interface subsystem, the system log contains another message that indicates the error that caused the subsystem to end abnormally. Follow the system programmer response for that message.

Source: Infoprint Server

AOP110E   Cannot connect to subsystem *subsystem***.**

Explanation: The Print Interface subsystem is not active.

In the message text:

subsystem
> Name of the Print Interface subsystem specified in the Infoprint Server configuration file, **aopd.conf**.

System Action: The print request is not completed.

Operator Response: Run the **aopstart** command or AOPSTART procedure to start the Print Interface subsystem.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem has been started.

System Programmer Response: Make sure that the **start-daemons** attribute in the Infoprint Server configuration file (**aopd.conf**) specifies the **subd** value so that the Print Interface subsystem daemon starts. Then, ask the operator to start Infoprint Server daemons.

Source: Infoprint Server

AOP111E   The inventory name *subsystem* **is not valid as a subsystem name.**

Explanation: The Print Interface subsystem is not active.

In the message text:

subsystem
> Name of the Print Interface subsystem specified in the Infoprint Server configuration file, **aopd.conf**.

System Action: The Print Interface subsystem is not started.

Operator Response: Notify your system programmer that this error occurred. After the problem is corrected, stop and restart all Infoprint Server daemons, IP PrintWay, and NetSpool. You might also have to stop and restart PSF for OS/390.

Refer to *z/OS Infoprint Server Operation and Administration* for information about how to stop and start Infoprint Server daemons, IP PrintWay, and NetSpool.

User Response: No response is necessary.

System Programmer Response: Change the value in the **inventory** attribute in the Infoprint Server

configuration file (**aopd.conf**) to specify a valid
subsystem name. Ensure that the first character of the
name is an uppercase letter. Because the subsystem
name is also the name of the Printer Inventory, you also
need to change the name of the inventory on the IP
PrintWay and NetSpool startup procedures. If PSF for
OS/390 uses the Printer Inventory, you also need to
change the name on the PSF for OS/390 startup
procedures. Follow these steps:

1. Change the name in the configuration file and
   startup procedures.
2. Stop all Infoprint Server daemons, IP PrintWay,
   NetSpool, and optionally PSF for OS/390.
3. Restart the Infoprint Server daemons.
4. Restart IP PrintWay, NetSpool, and PSF for OS/390.

Source: Infoprint Server

AOP997W   **Could not open message catalog**
     catalog_name, **using built-in messages.**

Explanation: Print Interface attempted to issue a
message, but the Print Interface message catalog could
not be opened. The **NLSPATH** environment variable is
probably not set correctly. Also, support for the current
setting of the **LANG** (language) environment variable
may not be provided. Print Interface currently supports
the POSIX locale (C), English (En_US) and Japanese
(Ja_JP). Refer to *z/OS Infoprint Server Customization*
for information about the **NLSPATH** and **LANG**
variables.

System Action: Processing continues, with Print
Interface using built-in messages, which are in English.

User Response: Ensure that the settings of the
NLSPATH and **LANG** environment variables are
correct. Then resubmit your print request to see the
correct message.

System Programmer Response: Ensure that the
settings of the **NLSPATH** and **LANG** environment
variables are correct.

Source: Infoprint Server

AOP998E   **Could not retrieve message,**
     cat=ized=*catalog_name*, **set=**setnum*,*
     num=msgnum*

Explanation: Message *msgnum* from set *setnum*
could not be retrieved from message catalog
catalog_name. This problem may be caused by Print
Interface trying to access a catalog that has been edited
and therefore has changed information or missing
messages.

System Action: Processing continues.

User Response: Contact your system programmer.

System Programmer Response: Verify that the
catalog name listed in the message is the catalog that

was installed with the product and not one that has
been altered. If Print Interface is trying to access the
correct message catalog, contact your service
representative in the IBM Support Center, or use your
electronic link with IBM service for assistance.

Source: Infoprint Server

AOP2001E   *procedure* **- An error was encountered**
     while attempting to allocate *n* **bytes for**
     object.

Explanation: Memory allocation error. The sap2afp
transform program cannot allocate sufficient memory to
perform *procedure* .

System Action: The request was not completed.

User Response: Increase the address space memory
allocation. Retry the request. If the error continues to
occur, notify the system programmer.

System Programmer Response: Increase the user's
memory allocation. Refer to *z/OS Infoprint Server
Customization* for more information.

Source: Infoprint Server

AOP2005E   **An invalid OTF command** *command*
     was found in line *linenumber*.

Explanation: The SAP to AFP transform encountered
an unrecognized SAP OTF command on line
linenumber in the SAP file. In the message text,
command is the SAP command that is not valid.

System Action: The request was not completed.

User Response: Verify the validity of your SAP OTF
file. If SAP OTF file is valid, notify your system
programmer.

System Programmer Response: Contact an IBM
service representative.

Source: Infoprint Server

AOP2006E   **An error was found in opening file** *file*.

Explanation: The sap2afp transform cannot open file
file.

System Action: The request was not completed.

User Response:

1. Check the configuration environment variable
   AOP_SAP2AFP_RESOURCES value. It must
   specify the sap2afp transform resources directory.
2. Check that the file exists, and that you have read
   permission for the file. You may not have the
   required permissions for the file or the directory
   containing the file. You must have **x** (execute) and
   w (write) permission for the directory containing the
   file and **w** and **r** (read) permission for the file itself.
3. Contact your system programmer.

System Programmer Response: Verify that file *file* is installed. *z/OS Infoprint Server Customization* for more information.

Source: Infoprint Server

AOP2007E   An error was found in closing file*file*.

Explanation: The sap2afp transform cannot close file *file*.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Contact an IBM service representative.

Source: Infoprint Server

AOP2008E   An error was found while processing file *file*.

Explanation: The sap2afp transform detected an error while processing file *file*.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Contact an IBM service representative.

Source: Infoprint Server

AOP2009E   A keyword *keyword* is missing from line *linenumber* in file *file*.

Explanation: A required keyword is missing from file *file*. The keyword specifies information about the printing of your file.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Refer to *z/OS Infoprint Server Customization* and sample files for keyword *keyword* usage and syntax.

Source: Infoprint Server

AOP2010E   A keyword *keyword* is missing from file *file*.

Explanation: A required keyword is missing from file *file*. The keyword specifies a processing default.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: *keyword* is a required keyword. Refer to *z/OS Infoprint Server Customization* for information regarding file *file* for keyword *keyword* usage and syntax.

Source: Infoprint Server

AOP2011E   An invalid line *linenumber* was found in file *file*.

Explanation: Line *linenumber* in file *file* contains incorrect syntax.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Refer to *z/OS Infoprint Server Customization* and sample files for the syntax of line *linenumber* in file *file*.

Source: Infoprint Server

AOP2012E   An invalid value was found for *keyword* at line *linenumber* in file *file*.

Explanation: Keyword *keyword* has been specified with an invalid value.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Refer to *z/OS Infoprint Server Customization* and sample files for keyword *keyword* usage and syntax.

Source: Infoprint Server

AOP2013E   Input line *linenumber* is too long in file *file*.

Explanation: The sap2afp transform read an input line that is more than 500 bytes long, or contains extra characters at the end of the line.

System Action: The request was not completed.

User Response: If file *file* is a ABAP format input file, check line *linenumber* for correct syntax.

System Programmer Response: If file *file* is a sap2afp configuration file (*.tab), check line *linenumber* for extra characters at the end of the line. *z/OS Infoprint Server Customization* for information about customizing the SAP-to-AFP transform.

Source: Infoprint Server

AOP2014E   Insufficient internal storage was available for *x*.

Explanation: While processing *x* internal sap2afp transform storage limits were exceeded.

System Action: The request was not completed.

User Response: Notify your system programmer.

System Programmer Response: Contact an IBM service representative.

Source: Infoprint Server

AOP2015W   A matching font (name size type**) was not found, so font** font **was substituted.**

Explanation: The sap2afp transform could not find fontname *name*, size *size* and type *type*, so font *font* was substituted. *font* is the the default character set (single-byte) or coded font (double-byte) that was substituted.

System Action: Processing of the file continues, with another font substituted.

User Response: If the substituted font is acceptable, no response is necessary. Otherwise, request the system programmer to configure **fonts.tab** to support the required font.

System Programmer Response: Configure the font definition file **fonts.tab** to support the missing font. Refer to *z/OS Infoprint Server Customization* for information about customizing the SAP-to-AFP transform.

Source: Infoprint Server

AOP2016E   A bar code matching barcode **was not found.**

Explanation: Bar code *barcode* was not found.

System Action: The request is not completed.

User Response: Notify your system programmer.

System Programmer Response: Install the missing bar code.

Source: Infoprint Server

AOP2018E   Line linenumber **contains an invalid ABAP command (**command**).**

Explanation: The SAP to AFP transform encountered an unrecognized SAP ABAP command on line *linenumber* in the SAP file. In the message text, *command* is the command that is not valid.

System Action: The request is not completed.

User Response: Verify the validity of your SAP ABAP file. If the SAP ABAP file is valid, notify your system programmer.

System Programmer Response: Contact an IBM service representative.

Source: Infoprint Server

AOP2020E   A format format **was not found in** file**.**

Explanation: The page definition file *file* does not contain format *format*.

System Action: The request is not completed.

User Response: Notify your system programmer.

System Programmer Response: Define format

format in page definition file *file*. *z/OS Infoprint Server Customization* for more information.

Source: Infoprint Server

AOP2022E   Unknown conversion field value **specified in** file**.**

Explanation: Conversion table file *file* specifies an invalid ″CONVERT FROM″ value *value*.

System Action: The request is not completed.

User Response: Notify your system programmer.

System Programmer Response: Refer to *z/OS Infoprint Server Customization* and sample files for valid conversion field values.

Source: Infoprint Server

AOP2023E   An error was encountered when trying to open iconv with conversion tables specifed as table1 **and** table2**.**

Explanation: iconv could not be opened with conversion tables *table1* and *table2*.

System Action: The request is not completed.

User Response: Notify your system programmer.

System Programmer Response: Install iconv conversion tables *table1* and *table2*. *z/OS Infoprint Server Customization* for more information.

Source: Infoprint Server

AOP2024E   Iconv failed, errno = number**.**

Explanation: iconv failed.

System Action: The request is not completed.

User Response: Notify your system programmer.

System Programmer Response: Use the iconv errno *number* to diagnose the problem.

Source: Infoprint Server

AOP2060E   Input filename **is not valid SAP data.**

Explanation: The SAP to AFP transform does not recognize the input data stream as a valid SAP data stream. The transform requires the following strings of data (in either EBCDIC or ASCII representation) in the header of an SAP input data stream:

```
V01 or *MAJOR=2
and
FORMAT=OTF or FORMAT=LIST
```

System Action: The request is not completed.

User Response: Make sure that you specified the

name of the correct input file and that the header contains the required data.

Source: Infoprint Server

AOP2201E   The effective UID of this program must not be 0.

Explanation: The Infoprint Server Transform Manager attempted to start a transform daemon; however, for security reasons, the Transform Manager requires that (1) the owner of the executable file for the transform *not* have a UID of 0 and (2) the set-user-ID flag for the file is turned on. The message contains the name of the executable file.

System Action: The Infoprint Server Transform Manager does not start the transform daemon. The Transform Manager attempts to start other transform daemons configured in the transform configuration file, **aopxfd.conf**.

User Response: Contact your system programmer.

System Programmer Response: Use the **ls** command to list the owner of the file and to verify that the set-user-ID flag is on:

```
ls -l /usr/lpp/Printsrv/bin/ps2afpd
```

Output from the **ls** command should look like the following, assuming that the owning user name is NOBODY and that the owning group name is NOGROUP:

```
-rwsr-xr-x 1 NOBODY NOGROUP ...
```

The lowercase letter s in the owner permissions section indicates that the set-user-ID flag is on and that the owner has permission to execute the file. Use the **id** command to determine the UID of the user.

If the user has a UID of 0, issue the z/OS UNIX **chown** command to change the owner of the file. For example, to change the owner of file **ps2afpd** to NOBODY, type:

```
chown NOBODY /usr/lpp/Printsrv/bin/ps2afpd
```

If the set-user-ID flag is off, or if you issued the **chown** command, use the **chmod** command to turn on the set-user-ID flag. For example, to turn the flag on for file **ps2afpd**, type:

```
chmod u+s /usr/lpp/Printsrv/bin/ps2afpd
```

Note: Refer to *z/OS Infoprint Server Customization* for more information about how to define a user and group to RACF.

Source: Infoprint Server

AOP2202E   *filename*: Incorrect file size.

Explanation: A resource file used by the PostScript/PDF to AFP transform daemon (**ps2afpd.dll**) has an incorrect size. This indicates that the transform resource file is not at the level that the transform daemon expects.

In the message text:

filename
        Name of the resource file

System Action: The transform daemon ends.

Operator Response: Notify your system programmer.

User Response: Not applicable.

System Programmer Response: Reinstall the transform daemon (**ps2afpd.dll**) and resource file (*filename*) to make sure that they are both at the latest level. Also, make sure that only one file with the name *filename* exists in the transform resource directories.

The optional AOP_RESOURCE_PATH environment variable in the transform configuration file, **aopxfd.conf**, specifies the names of the transform resource directories. In addition, transform resource files can exist in the default transform resource directory, **/usr/lpp/Printsrv/ps2afp**. This default directory is always searched, whether or not the AOP_RESOURCE_PATH variable is specified. For more information about the AOP_RESOURCE_PATH variable, refer to *z/OS Infoprint Server Customization*.

Source: Infoprint Server

AOP2203E   *filename*: Incorrect CRC.

Explanation: A resource file used by the PostScript/PDF to AFP transform daemon (**ps2afpd.dll**) has an incorrect cyclic redundancy check (CRC). This indicates that the transform resource file is not at the level the transform daemon expects.

In the message text:

filename
        Name of the resource file.

System Action: The transform daemon ends.

Operator Response: Notify your system programmer.

User Response: Not applicable.

System Programmer Response: Reinstall the transform daemon (**ps2afpd.dll**) and resource file (*filename*) to make sure that they are both at the latest level. Also, make sure that only one file with the name *filename* exists in the transform resource directories.

The optional AOP_RESOURCE_PATH environment variable in the transform configuration file, **aopxfd.conf**, specifies the names of the transform resource directories. In addition, transform resource files can exist in the default transform resource directory,

/usr/lpp/Printsrv/ps2afp. This default directory is always searched, whether or not the AOP_RESOURCE_PATH variable is specified. For more information about the AOP_RESOURCE_PATH variable, refer to *z/OS Infoprint Server Customization.*

Source: Infoprint Server

AOPS002I   Subsystem established successfully.

Explanation: The Print Interface subsystem was defined and activated.

System Action: Processing continues.

Operator Response: No response is necessary.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS004S   Subsystem create failed, undefined reason code.

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem returned an undefined reason code.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for information about IEFSSVT reason codes.

Source: Infoprint Server

AOPS005I   Subsystem already active.

Explanation: The Print Interface subsystem was already active when the **aopstart** command or AOPSTART procedure was run.

System Action: Processing continues.

Operator Response: No response is necessary.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS006E   Subsystem query failed.

Explanation: The IEFSSI REQUEST=QUERY macro to query the Print Interface subsystem failed.

System Action: The state of the Print Interface subsystem is not known. Job submitters might not be able to submit data sets to the Print Interface subsystem.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS007E   Subsystem exchange failed, no vector table.

Explanation: The IEFSSVT REQUEST=EXCHANGE macro failed because no vector table exists.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS008E   Subsystem activate failed, unknown subsystem.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem that Infoprint Server added no longer exists.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for information.

Source: Infoprint Server

AOPS009E   Subsystem activate failed, not dynamic.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem was not dynamic.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for information.

Source: Infoprint Server

AOPS010E   Subsystem activate failed, bad token.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the token returned by the IEFFSSI REQUEST=QUERY macro was not a valid token.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS011E   Subsystem activate failed, invalid name.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the Print Interface subsystem name contains characters that the subsystem interface (SSI) does not allow.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS012E   Subsystem activate failed, parameter string too long.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the parameter string was too long.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS013S   **Subsystem activate failed, undefined reason code.**

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed and returned an undefined reason code.

System Action: The subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS014E   **Subsystem activate failed, no vector table.**

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the vector table was undefined.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS015S   **Subsystem activate failed, system error.**

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem interface (SSI) returned a system error.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS016E   **Subsystem activate failed, SSI not available.**

Explanation: The IEFSSI REQUEST=ACTIVATE macro failed because the subsystem interface (SSI) is not yet initialized.

System Action: The Print Interface subsystem is not activated.

Operator Response: Wait for the SSI to be initialized. Then run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS017S   **Subsystem activate failed, undefined return code.**

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem interface (SSI) returned an undefined return code.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSI macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS019E   **Subsystem create failed, unknown subsystem.**

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the subsystem was not known.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS020E   **Subsystem create failed, maximum vector tables exist.**

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because there were too many vector table entries.

System Action: The Print Interface subsystem is not activated.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS021E   **Subsystem create failed, storage unavailable.**

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because not enough storage was available.

System Action: The Print Interface subsystem is not activated.

Operator Response: Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem. If the problem recurs, notify your system programmer that this error occurred.

User Response: No response is necessary.

System Programmer Response: Refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for information.

Source: Infoprint Server

AOPS022E   **Subsystem create failed, input table too large.**

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the MAXENTRIES value was smaller than the number of routines specified.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS023E   **Subsystem create failed, MAXENTRIES value too big.**

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the MAXENTRIES value was larger than the maximum allowed.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS024E Subsystem create failed, load error.

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because one or more of the functions was not found.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This message indicates an installation error. Ensure that the Print Interface subsystem routines are in LPALIB.

Source: Infoprint Server

AOPS025S Subsystem create failed, system error.

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed with a system error.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for information.

Source: Infoprint Server

AOPS026E Subsystem create failed, SSI not available.

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the subsystem interface (SSI) was not yet ready.

System Action: The Print Interface subsystem is not activated.

Operator Response: Wait until the SSI is initialized. Then run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS027S Subsystem create failed, undefined return code.

Explanation: The IEFSSVT REQUEST=CREATE macro failed with an undefined return code.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS028E Subsystem exchange failed, vector table full.

Explanation: The IEFSSVT REQUEST=EXCHANGE macro failed because the maximum number of routines was already loaded, and no more could be loaded.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS029S   Subsystem exchange failed, undefined reason code.

Explanation: The IEFSSVT REQUEST=EXCHANGE macro failed with an undefined reason code.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for more information.

Source: Infoprint Server

AOPS030S   Subsystem exchange failed, undefined return code.

Explanation: The IEFSSVT REQUEST=EXCHANGE macro failed with an undefined return code.

System Action: The Print Interface subsystem is not activated.

Operator Response: Notify your system programmer that this error occurred. Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

User Response: No response is necessary.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, refer to the description of the IEFSSVT macro in *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for information.

Source: Infoprint Server

AOPS101E   Invalid DSNAME format, use &&NAME

Explanation: The data set name coded in the DSNAME parameter on the DD JCL statement is in a format that the Print Interface subsystem does not support.

System Action: The Print Interface subsystem does

not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Code the DSNAME parameter in the format DSNAME=&&*name*. Then resubmit the job.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS203S   Allocation connect failed.

Explanation: The Print Interface subsystem allocation client could not connect to the Print Interface subsystem server. The subsystem server might be stopped.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem.

User Response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem has been started.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS204E   Subsystem server is not started.

Explanation: The connection to the Print Interface subsystem could not be completed because the server is stopped.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem.

User Response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem has been started.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS205E   Subsystem server token not available.

Explanation: The connection to the Print Interface subsystem has been lost because the Infoprint Server subsystem server has stopped.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface subsystem.

User Response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem has been started.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS206E   OUTPUT SWB not found.

Explanation: The OUTPUT parameter was specified on the DD JCL statement, but the output statement was not found.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS207E   OUTPUT GETSWB failed.

Explanation: The SWB for the OUTPUT JCL statement was found, but the GETSWB macro failed.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS208E   DD GETSWB failed.

Explanation: The SWB for the DD JCL statement was found, but the GETSWB macro failed.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that

this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

AOPS209E   Invalid SUBSYS parameters.

Explanation: You coded too many subparameters on the SUBSYS parameter.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Correct the SUBSYS parameter and resubmit the job. Refer to *z/OS Infoprint Server User's Guide* for information about how to code the SUBSYS parameter.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS211I   Allocation was cancelled.

Explanation: The CANCEL command was issued while the Print Interface subsystem was allocating the data set on the JES spool.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: No response is necessary.

System Programmer Response: No response is necessary.

Source: Infoprint Server

**AOPS212S   Allocation connect failed, no
                connection available.**

Explanation: The internal connection table for Print Interface was full because the maximum number of data sets was already being processed.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Resubmit the job when the system is less busy.

System Programmer Response: No response is necessary.

Source: Infoprint Server

AOPS301E   OPEN failed. result = *reason code*

Explanation: The Print Interface subsystem could not process the OPEN request from the subsystem interface (SSI) for the data set.

In the message text:

reason code   A code that indicates the reason for the error, in the format: 00*xxyyzz*, where *yyzz*.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Follow the system programmer response for the reason code in "Print Interface System Completion Code and Reason Codes" on page 91.

Source: Infoprint Server

AOPS401E   PUT failed. result = *reason code*

Explanation: The Print Interface subsystem could not process the PUT request from the subsystem interface (SSI) for the data set.

In the message text:

reason code   A code that indicates the reason for the error, in the format: 00*xxyyzz*, where *yyzz*.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Follow the system programmer response for the reason code in "Print Interface System Completion Code and Reason Codes" on page 91.

Source: Infoprint Server

AOPS501E   CLOSE failed. result = *reason code*

Explanation: The Print Interface subsystem could not process the CLOSE request from the subsystem interface (SSI) for the data set.

In the message text:

reason code   A code that indicates the reason for the error, in the format: 00*xxyyzz*, where *yyzz*.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Follow the system programmer response for the reason code in "Print Interface System Completion Code and Reason Codes" on page 91.

Source: Infoprint Server

AOPS701E   Disconnect failed. result = *reason code*

Explanation: The Print Interface subsystem could not process the disconnect request from the subsystem interface (SSI) for the data set.

In the message text:

reason code   A code that indicates the reason for the error, in the format: 00*xxyyzz*, where *yyzz*.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: Follow the system programmer response for the reason code in "Print Interface System Completion Code and Reason Codes" on page 91.

Source: Infoprint Server

AOPS702S   Subsystem server has terminated. result = *reason code*

Explanation: The Print Interface subsystem server ended.

In the message text:

reason code   A code that indicates the reason for the error, in the format: 00*xxyyzz*, where *yyzz*.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: Run the **aopstart** command or the AOPSTART procedure to restart the Print Interface

subsystem after the problem is corrected.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem is restarted.

System Programmer Response: Follow the system programmer response for the reason code in "Print Interface System Completion Code and Reason Codes".

Source: Infoprint Server

AOPS999T   Invalid message request.

Explanation: A Print Interface function made an invalid message request.

System Action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator Response: No response is necessary.

User Response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

System Programmer Response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Source: Infoprint Server

Print Interface System Completion Code and Reason Codes

The system completion code for abends issued by Print Interface and IP PrintWay is: **09B**. The reason code indicates whether IP PrintWay or Print Interface issued the abend, where:

00000000 – 0000FFFF
> Indicates that IP PrintWay issued the abend. See "IP PrintWay System Completion Code and Abend Reason Codes" on page 42 for an explanation of these codes.

0000FFFF – 00FFFFFF
> Indicates that Print Interface issued the abend. See this section for an explanation of these codes.

The following table lists the reason codes returned by Print Interface either in a message or as abend reason codes. These codes can help you determine why an error or abend occurred. The format of the reason code is:

00*xxyyzz*

where:

xx Specifies the type or error:
> **X'08'**   warning
> **X'0C'**   environmental error
> **X'10'**   system error
> **X'14'**   logic error

yy **and** *zz*
> Describe the reason for the error. Look up these hexadecimal values in Table 2.

Table 2. Print Interface Reason Codes

Reason Code (Hex)			
yy	**zz**	**Explanation**	**User or System Programmer Response**
07	01, 02, 03, 04	Another message indicates the cause of the problem.	Read the other messages to see what action is necessary.
08	01, 02, 03, 04	Another message indicates the cause of the problem.	Read the other messages to see what action is necessary.
09	01, 02, 03, 04	Another message indicates the cause of the problem.	Read the other messages to see what action is necessary.

Table 2. Print Interface Reason Codes (continued)

| Reason Code (Hex) | | Explanation | User or System Programmer Response |
yy	zz		
0A	01, 02, 03, 04	Another message indicates the cause of the problem.	Read the other messages to see what action is necessary.
0B	01, 02, 03, 04	Another message indicates the cause of the problem.	Read the other messages to see what action is necessary.
11	01	The Print Interface subsystem had an internal error. The Print Interface subsystem server has stopped and restarted.	Resubmit the print job. If the problem recurrs, notify your system programmer or IBM service representative.
	08	The Print Interface subsystem server is busy.	Resubmit the print job at a later time.
12	07, 08	The Print Interface subsystem was not running.	After the operator runs the **aopstart** command or the AOPSTART procedure to reestart the Print Interface subsystem, resubmit the print job.
14	04	The Print Interface subsystem had an internal error. The Print Interface subsystem server has stopped and restarted.	Resubmit the print job. If the problem recurrs, notify your system programmer or IBM service representative.
16	01	The region size is too small.	Increase the region size for the print job and resubmit it.
17	01	The application that created the output data used either an unsupported access method or access method function.	Change your application to use either the QSAM or BSAM access method. Use only the OPEN, CLOSE, and PUT functions. Resubmit the print job after the application has been changed.
	07, 08	The Print Interface subsystem was not running.	Restart the Print Interface subsystem and resubmit the print job.
19	04	An error occurred on the application side.	Read the other messages to see what action is necessary.
1C	02	Another message indicates the cause of the problem.	Correct the error and resubmit the print job.
Other codes		A possible logic error exists.	Contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.

Chapter 3. Infoprint Server AFP to PCL, AFP to PDF, and AFP to PostScript Transforms Messages

This chapter describes the messages that the AFP to PCL, AFP to PDF, and AFP to PostScript transforms, features of the Infoprint Server Transforms product (program number 5697-F51), can issue to the user.

The messages are included in the user's output file if possible; however, if the transform cannot write the message to the output file, the message is sent to the transform error log and a message is sent informing the user that there is a message in the error log. See "Finding the Transform stderr File" on page 209 for information about the error log.

Message Format

The messages have a message identifier followed by the message text, as shown below:

AOX_nnnnt_

AOX   Identifies Infoprint Server AFP transform messages

nnn   The message number

_t_   One-character type code:

Type code	Meaning
E	An error occurred. Eventual action is required
I	This is an information message.
W	A warning situation occurred.

Messages

AOX0000E   Option _option_ **argument missing**

Explanation: An expected argument for an AFP transform option was not supplied.

System Action: The AFP transform did not process the print request. No output was generated.

User Response: Ensure that the required argument options are supplied and resubmit the print request.

AOX0001E   Option _option_ **is not valid**

Explanation: An AFP transform option was not valid.

System Action: The AFP transform did not process the print request. No output was generated.

User Response: Ensure that the requested option is valid and resubmit the print request.

AOX0002E   MODCA or LINE expected

Explanation: An incorrect data format was received by the AFP transform.

System Action: The AFP transform did not process

the print request. No output was generated.

User Response: Ensure that the input data format is either MO:DCA or line data format and resubmit the print request if required.

AOX0004E   Input buffer too long

Explanation: An internal AFP transform error has occurred.

System Action: The AFP transform did not process the print request. No output was generated.

User Response: Contact an IBM service representative.

AOX0005E   Write Failed _socket error_

Explanation: An internal AFP transform error has occurred on the named socket write call.

System Action: The AFP transform did not process the print request. No output was generated.

User Response: Contact an IBM service representative.

AOX0006E   Read Failed *socket error*

Explanation: An internal AFP transform error has occurred on the named socket read call.

System Action: The AFP transform did not process the print request. No output was generated.

User Response: Contact an IBM service representative.

AOX0008E   Unexpected end of data

Explanation: An internal AFP transform error has occurred.

System Action: The AFP transform will not process the print request, and no output was produced.

User Response: Contact IBM with information about this error condition.

AOX0009E   Only one inputfile may be specified.

Explanation: Multiple AFP files were specified as input to the **afp2pdf** command line transform.

System Action: The request is not completed.

User Response: Resubmit the request with only one input file.

AOX0010E   Transform failed. See transform error log for additional information

Explanation: The transform detected an error while transforming data from one format to another. The transform was not able to write the error message in the output file. The transform wrote the errror message in the transform error log.

System Action: The request is not completed.

User Response: Contact your system programmer. Resubmit the request after the problem is corrected.

System Programmer Response: Correct the problem reported in the transform error log. See "Finding the Transform stderr File" on page 209 for information about the error log.

AOX0044I   DYNALLOC RC *rc* **ON PRINTER** *text* **INFO CODE** *info* **DSN** *dataset*

Explanation: An error occurred when a data stream transform attempted to dynamically allocate a data set. In the message text, *rc* and *info* are codes returned by the MVS DYNALLOC macro, and *dataset* is the name of the data set that could not be dynamically allocated.

If you are using the AFP to PCL, AFP to PostScript, or AFP to PDF transform, you might receive this message because one of the AFP resource libraries used by the transform is not available. The transforms use AFP resource libraries named in the AOP_FONTLIB,

AOP_FORMDEFLIB, AOP_PAGEDEFLIB, AOP_PAGESEGLIB, and AOP_OVERLAYLIB environment variables in the transform configuration file (**/etc/Printsrv/aopxfd.conf**). If one of these environment variables is not defined in the transform configuration file, then the transform uses the default libraries documented in *z/OS Infoprint Server Customization*.

System Action: Generation of the output is ended.

User Response: Look up the *info* code in *z/OS MVS Programming: Authorized Assembler Services Guide*, and perform the suggested corrective actions to resolve this problem. If an AFP resource library is not available in your installation, notify your system programmer that this error occurred.

System Programmer Response: Specify the correct AFP resource libraries in the transform configuration file. Then restart the Infoprint Server Transform Manager using the following z/OS UNIX commands:

```
aopstop -d xfd
aopstart
```

AOX0049I   INCORRECT CPC FOUND IN CODEPAGE *code page*

Explanation: The code page control record (CPC) is missing a value, or contains a value that is not valid. The terminology in this sentence doesn't match the description of the structured field in FOCA. Maybe just leave it out and refer them to the FOCA manual S544-3285. For information about what is specified on the CPC refer to *Font Object Content Architecture Reference*.

System Action: AFP transform attempted to use default values to print the font that referred to the incorrect code page. This might cause your output to look different than expected.

User Response: Fix the incorrect code page and verify that the supplied code page is valid.

AOX0081I   FONT *font name* **REDUCED BY** *value***/1440 IN**

Explanation: A request was made to map an outline font containing a non integer point size to an equivalent raster font. Raster fonts are not available in non-integer point sizes. The outline font will therefore be mapped to a smaller raster font. The reduction in font point size is indicated (represented in 1/1440 inch).

System Action: The supplied font resource will look different in the output than in the original file.

User Response: If you want to ensure document fidelity when printing documents containing AFP outline fonts on PCL printers, choose AFP outline fonts that contain integer point size values.

AOX0082I SEND OUTLINE CALLED *fontname*
codepage

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX0083I RECORD *name* **NOT FOUND**

Explanation: The input record *name* was not found in the current page definition.

System Action: Processing continues.

User Response: Correct the name.

AOX0084I WRONG GRAPHICS TRIPLET *triplet*

Explanation: The wrong graphic triplet was found in the current page definition.

System Action: Processing continues.

User Response: Verify the page definition. If no errors are found, contact an IBM service representative.

AOX0085I DUPLEX OPTION CHANGED FROM
ONE MMC TO NEXT MMC

Explanation: The duplex option changed between MMCs in the form definition.

System Action: Processing continues.

User Response: Verify the form definition. If no errors are found, contact an IBM service representative.

AOX0086I N_UP OPTION CHANGED FROM ONE
MMC TO NEXT MMC

System Action: Processing continues.

User Response: Verify the form definition. If no errors are found, contact an IBM service representative.

AOX0087I SIMPLEX REQUESTED FOR DUPLEX
ENHANCED N_UP

Explanation: You requested simplex processing on the transform command line, but the form definition specified enhanced n-up duplex.

System Action: Processing continues in duplex.

User Response: Specify duplex processing when you invoke the transform.

AOX0088I SCAN FDEF ENTERED MEDIUM MAP
mediummap

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX0089I SCAN FDEF TERMINATED. INVOKE
mediummap

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX0090I NOTE PREVIOUS RECORD CALLED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX0091I LINE DATA IN PAGE MODE

Explanation: A line data record was found between a Begin Page structured field and an End Page structured field.

System Action: Processing continues without the record.

User Response: Verify the input data set.

AOX0092W INVALID ID *id* **in MEDIUM OVERLAY**
name

Explanation: The overlay *name* is mapped with an ID greater than 127.

System Action: Processing ends.

User Response: Verify the form definition.

AOX0093I MEDIUM OVERLAY *name* **INCLUDED**
NEGATIVE

Explanation: An overlay is included with a negative placement.

System Action: Processing continues. Parts of the overlay outside the printable area may be lost.

User Response: Move the overlay down or to the right.

AOX0102W   BAD REPLY *value1* **from** *value2*

Explanation: An error occurred in the transform daemon. This message indicates a possible logic error.

System Action: The trasform daemon terminates.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Resubmit the job and obtain a trace of the transform. Refer to *z/OS Infoprint Server Messages and Diagnosis* for information about how to obtain a trace. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

AOX0314W   START OF STORAGE CHAIN DESTROYED FOR *name*

Explanation: This is a severe program error message.

System Action: Program operation might be impacted.

User Response: Contact an IBM service representative.

AOX0315W   END OF STORAGE CHAIN DESTROYED FOR *name*

Explanation: This is a severe program error message.

System Action: Program operation might be impacted.

User Response: Contact an IBM service representative.

AOX0316W   START OF STORAGE CHAIN DESTROYED FOR *name*

Explanation: This is a severe program error message.

System Action: Program operation might be impacted.

User Response: Contact an IBM service representative.

AOX0317W   END OF STORAGE CHAIN DESTROYED FOR *name*

Explanation: This is a severe program error message.

System Action: Program operation might be impacted.

User Response: Contact an IBM service representative.

AOX0322I   MORE THAN *nnnn* **FONTS IN USE**

Explanation: There are too many fonts being used in the print job.

System Action: Printing of this job is interrupted.

User Response: Verify that the document does not use more than the allowed number of fonts (127 PCL4 printers, 512 PCL5 printers, 127 DBCS fonts).

AOX0323I   MORE THAN *nnnn* **OVERLAY IN USE**

Explanation: There are too many overlays being used in the print job.

System Action: Printing of this job is interrupted.

User Response: Verify that the document does not use more than 255 overlays.

AOX0551I   INVALID NUMBER IN BIN *nnnnnn*

Explanation: The transform aopxfd.conf AOP_TRAYID value contains a numeric value that is not valid.

System Action: AFP to PCL, AFP to PDF, or AFP to PostScript transform continues using the default for the named value.

System Programmer Response: Correct the value in the transform configuration file, **aopxfd.conf**. Then stop the Transform Manager daemon using the **aopstop -d xfd** command, and restart it using the **aopstart** command. For information about the format of the **aopxfd.conf** file, refer to *z/OS Infoprint Server Customization* or see the **man** page for the **aopxfd.conf** file.

AOX0580I   OPEN ICDS FAILED

Explanation: An internal program error was encountered during AFP transform initialization.

System Action: The AFP transform is ended.

User Response: Contact an IBM service representative with information on this error condition.

AOX0585I   INVALID NUMBER IN BIN *nnn*

Explanation: The BIN keyword in the AFP to PCL, AFP to PDF, or AFP to PostScript transform profile has an invalid numeric value.

System Action: Processing continues, using the default value.

User Response: Correct the value of the BIN keyword.

AOX0885I   *bin* **OUT OF RANGE**

Explanation: The value of the AOP_TRAYID **bin** subparameter is not valid.

System Action: The AFP to PCL, AFP to PDF, or AFP to PostScript transform continues using the default AOP_TRAYID value.

System Programmer Response: Correct the transform subparameter to include a valid AFP_TRAYID value.

AOX0925I   **PAPER** *paper name* **NOT FOUND**

Explanation: The transform does not recognize the requested paper name in the AOP_PAPER variable in the transform configuration file.

System Action: The transform uses the A4 paper size.

User Response: Notify your system programmer that this error occurred.

System Programmer Response: Correct the paper name specified in the AOP_PAPER variable in the transform configuration file, **aopxfd.conf**. Then restart the Infoprint Server Transform Manager using the following z/OS UNIX commands:

```
aopstop -d xfd
aopstart
```

Refer to *z/OS Infoprint Server Customization* for information about the transform configuration file.

AOX1003I   **PS/PCL/PDF TRANSFORM VERSION** *version*

Explanation: Indicates the version level of the transform.

System Action: Processing continues.

User Response: None.

AOX1059I   **ALLOCATE USERLIB ENTERED**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1063W   **DYNALLOC RC =** *cccc* **FOR DATASET** *data set*

Explanation: An internal processing error occurred during dynamic allocation for the user library data set *data set*. Refer to the error reason code from the SVC 99 macro (DYNALLOC). This information can be found in *z/OS MVS Programming: Authorized Assembler Services Guide*.

System Action: A severe program error has occurred.

User Response: Ensure that the named data set exists and that it contains the correct DCB attributes (Variable Blocked or Machine). If this is the case, contact an IBM service representative with a description of the problem.

AOX1064I   **DDNAME =** *ddname* **FOR DATASET** *dataset*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1065I   **CONCATENATE RC** *cccc*

Explanation: An error occurred during data set concatenation for a requested user library. The return code supplied in the message contains additional details regarding this error. Refer to the error reason code from the SVC 99 macro (DYNALLOC). This information can be found in *z/OS MVS Programming: Authorized Assembler Services Guide*.

System Action: A severe program error has occurred.

User Response: Contact an IBM service representative with a description of the problem.

AOX1066I   **ALLOCATE USERLIB TERMINATED**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1067I   **DEALLOCATE USERLIB ENTERED**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1068I   **DECONCATENATE FAILED RC** *cccc*

Explanation: An error occurred during data set deconcatenation for a user library. The return code supplied in the message contains additional details regarding this error. Refer to the error reason code from the SVC 99 macro (DYNALLOC). This information can be found in *z/OS MVS Programming: Authorized Assembler Services Guide*.

System Action: A severe program error has occurred.

User Response: Contact an IBM service representative with a description of the problem.

AOX1069I   **DEALLOC RC** *cccc* **FOR DDNAME** *ddname*

Explanation: An internal processing error has occurred during deallocation for ddname *ddname*. The return code supplied in the message contains additional details regarding this error. Refer to the error reason code from the SVC 99 macro (DYNALLOC). This information can be found in *z/OS MVS Programming: Authorized Assembler Services Guide*.

System Action: A severe program error has occurred.

User Response: Contact an IBM service representative with a description of the problem.

| **AOX1070I**   **DEALLOCATE USERLIB TERMINATED**

| **Explanation:** The AFP to PCL, AFP to PDF, or AFP to
| PostScript transform trace program issues this message
| to indicate its progress.

| **System Action:** Processing continues.

| **User Response:** None.

AOX1086W   **INVALID INPUT FILE**

| **Explanation:** Incorrect input data was encountered.
| The input file did not contain a valid MO:DCA begin
| structured field.

System Action: The supplied input file will not be processed.

User Response: Verify that a valid input file is specified. Resubmit the print job if necessary.

AOX1088I   **INVALID MPO STRUCTURED FIELD**

Explanation: An error within the MO:DCA Map Page Overlay (MPO) structured field was found.

System Action: The supplied MPO will not be used.

User Response: An error was encountered within the MO:DCA MPO structured field. Verify that this structured field is coded correctly.

AOX1089W   **DATA FOLLOWED CONSTANT FORM IN** *formdef*

Explanation: An error occurred when processing a form definition *formdef* containing constant form data. A constant form has been specified in a copy group where data is also present.

System Action: Print job is ended.

User Response: Correct the data set or form definition, so that no print records are sent on the same page where the constant form is printed.

AOX1090I   *data* **UNEXPECTED RECORD IN MAIN**

Explanation: Unexpected or unknown record or data *data* was detected in the input data by the primary processing routine (MAIN).

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the input data has not been corrupted and has been created correctly.

AOX1091W   **WRONG LENGTH IN INVOKE DATA MAP**

Explanation: The length field specified on the MO:DCA Invoke Data Map does not match the actual field length. The structured field length indicated was less than zero or greater than eight.

System Action: Processing for the current print job is ended.

User Response: Ensure that the member that received the error is valid, and has not been corrupted or destroyed.

AOX1092W   **WRONG LENGTH IN INVOKE MEDIUM MAP**

Explanation: The length field specified on the MO:DCA Invoke Medium Map does not match the actual field length. The structured field length indicated was less than zero or greater than eight.

System Action: Processing for the current print job is ended.

User Response: Ensure that the member that received the error is valid, and has not been corrupted or destroyed.

AOX1093W   **INVALID UNITS IN PAGE DESCRIPTOR**

Explanation: An incorrect unit base value was identified in an overlay or page segment resource.

System Action: The job referring to the named resource will not be printed.

User Response: The named resource type is corrupted, and cannot be used for printing. Use the IO transform trace option to determine the resource type of the failing resource.

AOX1094W   **CONSTANT FORM FOLLOWED BY DATA**

Explanation: An error occurred when processing a form definition containing constant form data. A constant form has been specified in a copy group where data is also present.

System Action: The constant form was not processed correctly.

User Response: Correct the data set or form definition, so that no print records are sent on the same page where the constant form is printed. Include NOP records or other methods to ensure that data is not printed on the same page as the constant form.

AOX1102I   SHORT RECORD FOUND LENGTH *length*

Explanation: An error was encountered processing MO:DCA data. A MO:DCA structured field was processed that was fewer than nine bytes.

System Action: The output job producing the error is ended and processing continues.

User Response: Validate that the print output containing MO:DCA (X'5A') records has not been corrupted, and that records are at least nine bytes in length (X'5A' plus eight bytes).

AOX1103I   CC = *cc*

Explanation: This message identifies the structured field that is being processed.

System Action: Processing continues.

User Response: None.

AOX1104I   CMD = *command* **LENGTH =** *length*

Explanation: This message identifies the structured field that is being processed..

System Action: Processing continues.

User Response: None.

AOX1105I *hexadecimal data*

Explanation: This message contains hexadecimal data dumped by message AOX1104I.

System Action: Processing continues.

User Response: None.

AOX1106I *member* **FOUND IN USERLIB**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1109W *mbr ddname* **MEMBER NOT FOUND**

Explanation: The named member could not be found in the library with the specified DDname.

System Action: Processing ends.

User Response: Verify that the named AFP resource is in the correct library.

AOX1111I *member ddname* **OPENED FOR READ**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1112I   RECFM = *recfm* **LRECL =** *lrecl* **BLKSIZE = ** *blksize*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1113W *data set member* **INVALID RECORD FORMAT**

Explanation: The named data set member cannot be used as a print resource because the dataset does not have a valid record format.

System Action: The output job producing the error is ended and processing continues.

User Response: Correct the incorrect data set containing the print resource. Ensure that the data set attributes (RECFM) are set correctly. Allowable record formats are: V or VBM.

AOX1114W *data set member* **INPUT FILE NOT FOUND**

Explanation: An expected data member could not be found.

System Action: he output job producing the error is ended and processing continues.

User Response: Validate that all input data and resources have been supplied.

AOX1116I *member ddname* **CLOSED**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1118I   NOTE CALLED

Explanation: The **note** macro has started recording for a data set.

System Action: Processing continues.

User Response: None.

AOX1120I   POINT CALLED

Explanation: The **point** macro has started repositioning an input data set.

System Action: Processing continues.

User Response: None.

AOX1123W   *data set member* **READ FAILED**

Explanation: The named data set member contained an incorrect record format.

System Action: The output job producing the error is ended and processing continues.

User Response: Validate that the input data record format is acceptable and that the input data has not been corrupted.

AOX1128I   PREVIOUS LOG DATA IS LOST DUE TO WRAP

Explanation: The printer log data set has been wrapped. Information recorded earlier has been deleted.

System Action: Processing continues.

User Response: None.

AOX1310I   PRINTER TYPE *type* **VERSION** *xxx*

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1311I   PRINTER TYPE *type* **VERSION** *xxx,yyy*

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1312I   PRINTER PART NUMBER *nnnnnnnn*

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1313I   NON QUERIED INTERFACE

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1314I   ICDS LEVEL 4 SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1315I   ICDS LEVEL 3 SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1316I   ICDS LEVEL 1 SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1317I   RESOURCE SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1318I   LEVEL 3 SCALEABLE FONT SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1319I   LEVEL 4 SCALEABLE FONT SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1320I   NO AFP SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1321I   DUPLEX SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1322I   ORIENTATION SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1323I   GRAPHICS SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1324I   GRAPHICS OVERLAY SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1325I   COPY SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1326I   BIN SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1327I   NO JOG SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1328I   JOG SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1329I   BINARY SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1330I   INFO SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1333I   OUTBIN SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1334I   TYPE 1 FONT SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1335I   COLOR SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1336I   JPEG SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1337I   COLOR SPACE SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1338W   TOO MANY 24 BIT COLORS IN USE

Explanation: An attempt to print a graphic object boundary line containing more than 128 extended colors failed. A maximum of 128 extended colors is supported.

System Action: Printing of the current job ends.

User Response: Reduce the color complexity of the print resource containing the graphic object boundary line and resubmit it.

AOX1339I   COLOR RASTER SUPPORT

Explanation: This message is issued in response to a query. It indicates specific product features.

System Action: Processing continues.

User Response: None.

AOX1370I   ICDS INPUT

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1371I   *hexadecimal data*

Explanation: This message contains hexadecimal data dumped by message AOX1370I.

System Action: Processing continues.

User Response: None.

AOX1372I   RESPONSE RECEIVED

Explanation: This message is returned as a response to a trace request (HEX).

System Action: Processing continues.

User Response: None.

AOX1373I   *hexadecimal data*

Explanation: This message contains hexadecimal data dumped by message AOX1372I.

System Action: Processing continues.

User Response: None.

AOX1374I   ICDS OUT LENGTH

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1375I   *hexadecimal data*

Explanation: This message contains hexadecimal data dumped by message AOX1374I.

System Action: Processing continues.

User Response: None.

AOX1376I   GETPARM *cccc text*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1377I   GETPARM *cccc* NOT FOUND

Explanation: An internal program error has occurred during processing.

System Action: Processing continues.

User Response: Contact an IBM service representative with a description of the problem.

AOX1378I   ERROR RETURNED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1379I   VALUE RETURNED *value*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1380I VALUE RETURNED *value*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1381I VALUE RETURNED *value*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1382I NEXTPARM *cccc text*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1383I NO MORE RETURNED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1384I CHANGE SET TO *cccc text* **GROUP** *group*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1390I MORE THAN 255 OVERLAYS IN USE

Explanation: More than 255 overlays are being used within the print job.

System Action: Printing of this job is ended.

User Response: Verify that the document does not use more than 255 overlays.

AOX1392I HIGH MEMORY REQUESTED BY *id*

Explanation: Request *id* for memory has been received.

System Action: Processing continues.

User Response: None.

AOX1393I INSUFFICIENT REGION FOR JOB

Explanation: Insufficient region is available for processing.

System Action: Processing for the AFP transform is ended.

User Response: Increase the region size for the AFP to PCL, AFP to PDF, or AFP to PostScript transform (for example, BPXAS). Then stop the Transform Manager daemon using the **aopstop -d xfd** command, and restart it using the **aopstart** command. For information about the format of the **aopxfd.conf** command, refer to *z/OS Infoprint Server Customization* or see the **man** page for the aopxfd.conf file.

AOX1394I STORAGE ALLOCATED AT *address* **LENGTH** *length* **CALLED BY** *id*

Explanation: This information-only message defines the virtual storage allocated during processing. The 8-byte hexadecimal *address* is the storage location; *length* is the range allocated; and *id* is the request for allocation.

System Action: Processing continues.

User Response: None.

AOX1395I LONG STORAGE ALLOCATED AT *address* **LENGTH** *length* **CALLED BY** *id*

Explanation: This information-only message defines the virtual storage allocated during processing. The 8-byte hexadecimal *address* is the storage location; *length* is the range allocated; and *id* is the request for allocation.

System Action: Processing continues.

User Response: None.

AOX1396I WRONG FREEMAIN AT ADDR *xxxxxxx* **CALLED BY** *module*

Explanation: An internal transform error occurred.

System Action: Processing of job continues.

User Response: Retry the print job If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1397I   STORAGE RELEASED AT *address*
        LENGTH *length* **CALLED BY** *id*

Explanation: This information-only message defines the virtual storage released during processing. The 8-byte hexadecimal *address* is the storage location; *length* is the range allocated; and *id* is the request for release.

System Action: Processing continues.

User Response: None.

AOX1398I   STORAGE RELEASED AT *address*
        LENGTH *length* **CALLED BY** *id*

Explanation: This information-only message defines the virtual storage released during processing. The 8-byte hexadecimal *address* is the storage location; *length* is the range allocated; and *id* is the request for release.

System Action: Processing continues.

User Response: None.

AOX1399I   LONG STORAGE RELEASED AT
        address **LENGTH** *length* **CALLED BY** *id*

Explanation: This information-only message defines the virtual storage released during processing. The 8-byte hexadecimal *address* is the storage location; *length* is the range allocated; and *id* is the request for release.

System Action: Processing continues.

User Response: None.

AOX1500I   EOD ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1501I   EOD TERMINATED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1502I   BGP ENTERED, PAGE *page*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1503I   BIN *nn* **NOT ON PRINTER**

Explanation: The selected paper bin *nn* is not installed in the printer.

System Action: Paper bin 1 will be used.

User Response: Verify that the paper bin selected using the BIN command is available in the target printer Adjust the BIN command specification accordingly.

AOX1504I   BGP TERMINATED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1505I   EPG ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1506I   *nn* CHARACTERS OUTSIDE LOGICAL
        PAGE ON PAGE *pp*

Explanation: The placement of character data was outside the logical page.

System Action: The characters outside the defined logical page for page number *pp* will not be printed. Processing continues.

User Response: Verify that the defined logical page size (specified within the MO:DCA input) matches the supplied data. Adjust the input data or corresponding page and form definition where required.

AOX1507I   *nnn* RULERS OUTSIDE LOGICAL PAGE
        ON PAGE *pp*

Explanation: Presentation Text Draw rule commands placed one or more rules (*nnn*) outside the logical page.

System Action: *nnn* draw rules will not be printed; processing continues.

User Response: Ensure that the logical page area matches the input data placement.

AOX1508I *nnn* **NEGATIVE RULER REMOVED ON PAGE** *pp*

Explanation: One or more draw rule commands contained a negative page coordinate, (that is, the print position is outside of the page area) and was removed on page number *pp*.

System Action: *nnn* draw rules will not be printed; processing continues.

User Response: Remove the rule or adjust the rule position so that it can be printed.

AOX1509I *nnn* **NEGATIVE RULER FOUND ON PAGE** *pp*

Explanation: One or more (*nnn*) presentation text draw rule commands contained a negative page coordinate on page *pp* (that is, the print position is outside of the page area). The draw rule commands have been modified to permit printing of a portion of the rule.

System Action: The portion of the rule that can be placed on the page is printed and the remainder of the rule is removed. Processing continues.

User Response: Use the offset value supplied in the form definition, or the JCL OFFSET x and y values, and x and y image-shift job attributes to readjust the entire page position.

AOX1510I **END PAGE CALLED WITH NO PAGE ACTIVE**

Explanation: An internal processing error was encountered.

System Action: Processing for this print job continues.

User Response: If this problem persists, contact an IBM service representative.

AOX1511I *nnn* **IMAGE OUTSIDE LOGICAL PAGE ON PAGE** *pp*

Explanation: Write image commands placed the image outside the logical page.

System Action: The number of image lines indicated (*nnn*) will not be printed.

User Response: Ensure that the logical page area matches the input data placement.

AOX1512I *nn* **NEGATIVE IMAGE FOUND ON PAGE** *pp*

Explanation: The print position of an image is outside of the page area.

System Action: The portion of the image that can be placed on the page is printed and the remainder of the

image is deleted. Processing continues.

User Response: Use the OFFSET x and y values to readjust the entire page position.

AOX1513I *nn* **IMAGE ADJUSTED ON PAGE** *pp*

Explanation: An image print position was outside the page area on page *pp*. The image was adjusted so a portion of the image could be printed.

System Action: A partial image is produced at the requested location. Processing continues.

User Response: Use the OFFSET x and OFFSET y values to readjust the entire page.

AOX1514I **EPG TERMINATED, CONTINUE =** *nn*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1515I **BIM ENTERED**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1516I **IMAGE ORIENTATION** *orient* **NOT SUPPORTED**

Explanation: A specified image orientation value is not supported. Valid values are 0, 90, 180 and 270.

System Action: The image data will be printed using 0-degree orientation.

User Response: Correct the input image orientation value and resubmit the job.

AOX1517I **IMAGE SCALE FACTOR** *nnnn* **NOT SUPPORTED**

Explanation: The image scale factor specified (*nnnn*) is not supported. The only supported values are 03E8 and 07D0.

System Action: The image data will be printed using a scale factor of 03E8. Double pel image data will be printed as single pel image.

User Response: Correct the input image scale factor and resubmit the job.

AOX1519I   PAGE SIZE *xsize ysize*

Explanation: This information-only message displays the logical page size.

System Action: Processing continues.

User Response: None.

AOX1520I   PAGE OFFSET *xoffset yoffset*

Explanation: This information-only message displays the logical page offset.

System Action: Processing continues.

User Response: None.

AOX1521I   IMAGE START *xorigin yorigin*

Explanation: This information-only message displays the image origin.

System Action: Processing continues.

User Response: None.

AOX1522I   IMAGE CELL *xsize ysize*

Explanation: This information-only message displays the image cell size.

System Action: Processing continues.

User Response: None.

AOX1523I   IMAGE REPEAT *xrepeat yrepeat*

Explanation: This information-only message displays the image cell repeat value.

System Action: Processing continues.

User Response: None.

AOX1524W   UNEXPECTED END OF FILE IN IMAGE

Explanation: A premature end of file indicator was encountered in an input IOCA image.

System Action: Processing of this job ends.

User Response: Verify that the image data is not corrupted and resubmit the print job.

AOX1525I   BIM TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1526W   *data* UNEXPECTED RECORD IN IMAGE

Explanation: An unexpected or unknown record or data *data* was detected within the named resource type.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the input data has not been corrupted and has been created correctly.

AOX1527I   INSUFFICIENT STORAGE FOR IMAGE CELLS

Explanation: Insufficient virtual storage was available for the page segment image processing. An image cell is encountered that exceeds 64K

System Action: Processing for the current print job is ended.

User Response: Regenerate the input image using a smaller image cell size and resubmit the print job.

AOX1528I   INVALID IMAGE LENGTH

Explanation: A MO:DCA image raster data structured field contained an incorrect length value.

System Action: Processing for the current print job is ended.

User Response: Verify that the image data is valid, and, if required, recreate the input image data.

AOX1529I   IMAGE WRITTEN

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1530I   BIO ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1531I   BIO TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1532W   INVALID OUTPUT OPTION *option*

Explanation: An IOCA output image option was not valid. The range of supported options is: **position and trim**, **point to pel**, **point to double pel**, **center and trim** , and **scale to fit**.

System Action: The supplied IOCA image will not be printed.

User Response: Modify the IOCA output image option to match one of the supported values, and resubmit the print job if necessary.

AOX1533W   WRONG IMAGE DATA *xx*

Explanation: IOCA Image data was processed with errors. The one byte IOCA structured field *xx* is not supported. The supported range of values are: **begin image**, **begin image control**, **image size**, **image encoding parameter**, **image element size**, **image lookup table**, **band parameter**, **end of image contents**, **IDD structure parameter**, and **end image**.

System Action: The job is ended.

User Response: Verify that the input data contains valid and supported IOCA image data, and resubmit the print job if necessary.

AOX1534W   STRUCTURED FIELD MISSING

Explanation: An expected structured field construct was missing.

System Action: Processing continues.

User Response: Verify that the input datastream has not been corrupted, and resubmit the print job.

AOX1535I   IMAGE SIZE LENGTH TOO SMALL

Explanation: An error was encountered when attempting to print image data. There was less image data was less than expected.

System Action: The image data will not be printed.

User Response: Validate that the input has not been corrupted.

AOX1536I   IMAGE ENCODING SIZE LENGTH TOO SMALL

Explanation: An IOCA image length field does not match the length of the MO:DCA image. The length value specified from within an image is incorrect.

System Action: The image data will not be printed.

User Response: Verify that valid image data has been used.

AOX1537W   INVALID IDE *nn* **RECEIVED**

Explanation: An IOCA Image Data Element lookup table processed is not supported. Valid IDE values are 1 and 8.

System Action: The image data will not be printed.

User Response: Verify that the Image Data Element lookup table is supported.

AOX1538W   INVALID END SEGMENT IN IO IMAGE

Explanation: A MO:DCA IOCA image resource contains an incorrect end segment structured field, or the structured field length does not match the supplied data.

System Action: Processing continues.

User Response: Verify that the IOCA image is not corrupted, and resubmit the print job.

AOX1539W   UNSUPPORTED IMAGE COMPRESSION *type*

Explanation: The transform does not support the type of image compression found in the input data stream. In the message text, *type* is a code that indicates the type of image compression. Refer to *IOCA Reference* for an explanation of the code.

If *type* value is 83, the input data stream might contain an IOCA Color Plus image object (IOCA FS45), which the transform does not support.

System Action: Printing of the current data set is ended

User Response: Where possible, resubmit the print job using an alternate IOCA image compression algorithm.

AOX1540W   IMAGE TOO LARGE *nnnn nnnn*

Explanation: Printing of an IOCA image ended because image widths larger than 6000 image points are not supported.

System Action: Printing of the current data set ends.

User Response: Retry the print operation with a different image size.

AOX1541I   INVALID OBJECT ORIENTATION FOUND *xxxx*

Explanation: An unsupported orientation specification was detected within an IOCA image object.

System Action: The IOCA image will not be printed.

User Response: Verify that the orientation you wish to print is supported.

AOX1542I   WRONG IMAGE *xxxx*

Explanation: IOCA Image data was processed with errors. The IOCA image beginning with the hexadecimal string *xxxx* is in error because the value received is not supported. Supported values are: **image data**, **image band data**, **image picture data**, and **image sub-sampling**.

System Action: The job is ended.

User Response: Verify that the input data used is correct and resubmit the print job.

AOX1543W   ERRORS FOUND IN MR ENCODING

Explanation: Errors within IOCA image modified read encoding were encountered.

System Action: The IOCA image will not be printed.

User Response: Verify that the defined IOCA image is correct, and the data is not corrupted.

AOX1544W   UNEXPECTED END OF FILE IN IMAGE

Explanation: A premature end of file indicator was encountered in an input IOCA image block.

System Action: Processing of this print job is ended.

User Response: Verify that the IOCA image data is not corrupted and resubmit the print job.

AOX1545I   BIO TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1546I   *data* UNEXPECTED RECORD IN IO IMAGE

Explanation: An unexpected record or MO:DCA command (*data*) was detected within the IOCA image.

System Action: Processing continues without the named IOCA image.

User Response: Verify that the IOCA image has not been corrupted and has been created correctly.

AOX1547W   INVALID UNITS IN IO

Explanation: An incorrect unit base value was identified in an IOCA image.

System Action: The job referring to the IOCA image will not be printed. AFP transform processing continues.

User Response: The IOCA image is corrupted, and cannot be used for printing.

AOX1548W   EXT1D FOUND

Explanation: The extension ID found in an MMR compressed image is not supported.

System Action: Processing of the image ends.

User Response: The MMR extension id is not supported.

AOX1549W   EXT2D FOUND

Explanation: The extension ID found in an MMR compressed image is not supported.

System Action: Processing of the image ends.

User Response: The MMR extension id is not supported.

AOX1550W   NEGATIVE RUN FOUND

Explanation: An incorrect MMR compressed image has been detected.

System Action: Processing of the image ends.

User Response: The MMR image is not valid.

AOX1551W   EXCESSIVE RUN FOUND

Explanation: An incorrect MMR compressed image has been detected.

System Action: Processing of the image ends.

User Response: The MMR image is not valid.

AOX1552I   IMAGE COMPRESS = *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1553I   OUTPUT OPTIONS = *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1554I   IDE OPTIONS = *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1555I   INPUT SIZE = *size* **X=** *xxxxx* **Y=** *yyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1556I   OBJECT ORIGIN = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1557I   OBJECT SIZE = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1558I   IMAGE SIZE = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1559I   OBJECT ORIGIN IN DOTS = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1560I   OBJECT SIZE IN DOTS = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1561I   IMAGE SIZE IN DOTS = *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1562I   ORIENT = *orientation*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1563I   MIN X,Y = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1564I   MAX X,Y = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe IO image processing.

System Action: Processing continues.

User Response: None.

AOX1565I   DR ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1566W   INVALID GDD TRIPLET *triplet*

Explanation: An unknown MO:DCA Graphic Data Descriptor triplet was detected. The structured field was not recognized.

System Action: Processing continues without this resource.

User Response: Verify that the graphic object has been generated correctly.

AOX1567I   PICTURE LEFT VALUE IS NEGATIVE - *value*

Explanation: An attempt was made to position an image value outside of the page area. The extent of position outside the printable area is indicated in pels.

System Action: Processing for this print job continues, part of the image data will be deleted.

User Response: Move the image data to the right of the page, or reduce the image X offset placement value and resubmit the print job.

AOX1568I   PICTURE TOP VALUE IS NEGATIVE - *value*

Explanation: An attempt was made to position an image value outside of the page area. The extent of position outside the printable area is indicate in pels.

System Action: Processing for this print job continues, part of the image data will be deleted.

User Response: Move the image data down the page, or reduce the image Y offset placement value and resubmit the print job.

AOX1569W   INVALID PARAMETER IN GDD SET DEFAULT

Explanation: An incorrect parameter was specified in the MO:DCA GDD set default structured field contained within a graphic object.

System Action: Processing continues without this resource.

User Response: Verify that the graphic object has been generated correctly.

AOX1570W   INVALID OUTPUT OPTION *option*

Explanation: A GOCA graphic output option *option* is not supported. Supported values are: **scale to fit**, **position and trim** , and **center and trim**.

System Action: The supplied graphic object will not be printed.

User Response: An error was found in the specification of a graphic object. Use a different GOCA output option and resubmit the print job.

AOX1571W   WRONG GRAPHIC DATA *data*

Explanation: A MO:DCA graphic data structured field contained an unacceptable value.

System Action: The supplied graphic object will not be printed.

User Response: An error was encountered within the specification of a graphic data structured field. Validate that the graphic object has been generated correctly.

AOX1572W   WRONG GRAPHIC DATA *data*

Explanation: A MO:DCA graphic data structured field contained an unacceptable value.

System Action: The supplied graphic object will not be printed.

User Response: An error was encountered within the specification of a graphic data structured field. Validate that the graphic object has been generated correctly.

AOX1573W   INVALID OBJECT ORIENTATION FOUND *orientation*

Explanation: An orientation error within a supplied image was encountered.

System Action: The supplied image will not be used.

User Response: Ensure that the orientation value is 0, 90, 180 or 270.

AOX1574W   UNEXPECTED END OF FILE IN GOCA

Explanation: A premature end of file indicator was encountered in an graphic object.

System Action: Processing for this print ends.

User Response: Verify that the graphic data is not corrupted and resubmit the print job.

AOX1575I   *data* UNEXPECTED RECORD IN GRAPHIC OBJECT

Explanation: Unexpected or unknown record or data (*data*) was detected within the GOCA object.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the resource has not been corrupted and has been created correctly.

AOX1576W   INVALID UNITS IN GOCA

Explanation: A GOCA object contained an incorrect unit base value.

System Action: The job is ended.

User Response: Correct the supplied GOCA object.

AOX1577I   DR TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1578I   OUTPUT OPTIONS = *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1579I   OBJECT ORIGIN = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1580I   OBJECT CONTS = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1581I   OBJECT SIZE = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1582I   X SIZE = *size*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1583I   Y SIZE = *size*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1584I   X,Y SIZE = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1585I   X,Y IN UNITS = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1586I   OBJECT ORIGIN IN DOTS = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1587I   OBJECT SIZE IN DOTS = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1588I   ORIENTATION = *orientation*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1589I   MIN X,Y = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1590I   MAX X,Y = *xxxxxxx yyyyyyy*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to describe GOCA processing.

System Action: Processing continues.

User Response: None.

AOX1591W   LINE MISSING IN DRCHARS

Explanation: An internal program error has occurred.

System Action: Processing continues.

User Response: Contact an IBM service representative.

AOX1592W   GOCA CHARACTER TOO LARGE

Explanation: A graphic character contained within a graphic object contained a size value that exceeded character set.

System Action: Processing continues.

User Response: Correct the graphic object.

AOX1593I   CHARACTER SET *font code page* **CAN NOT BE SCALED**

Explanation: An attempt was made to scale a character set in GOCA Graphics processing, but the character set cannot be scaled.

System Action: The program continues without the named font.

User Response: Scaling of characters in AFP GOCA (graphic) resources is not supported. The named character set and font was not scaled.

AOX1594I   MORE THAN *nnn* **IN DRAWING**

Explanation: A graphic object contained too many line draw commands within a graphic area.

System Action: Processing continues.

User Response: The graphic area is too complex to print.

AOX1595I   DR VECTORS WRITTEN

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1596I   INVALID TYPE OF EXTERNAL ALGORITHM

Explanation: An IOCA image object contains an incorrect external encoding algorithm. Only compression and recording algorithms are supported.

System Action: The print job ends.

User Response: Remove the IOCA object from the print job and resubmit the job.

AOX1597I   UNSUPPORTED JPEG ALGORITHM *xx*

Explanation: An IOCA image object contains an unsupported JPEG encoding algorithm of type *xx*. AFP to PCL, AFP to PDF, and AFP to PostScript transforms support all JPEG encoding except differential encoding.

System Action: The print job ends.

User Response: Remove the IOCA object from the print job and resubmit the job.

AOX1598I   JPEG ALGORITHM EXPECTED

Explanation: An external algorithm has been received, but it is not a JPEG algorithm.

System Action: The print job ends.

User Response: Examine any other messages issued as a result of this condition. Remove the JPEG object from the print job and resubmit the job.

AOX1599I   RECORDING ALGORITHM NOT SUPPORTED

Explanation: A JPEG encoded image object contains an unsupported JPEG recording algorithm.

System Action: The print job ends.

User Response: Remove the JPEG object from the print job and resubmit the job.

AOX1600I   PSEG ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1602I   PSEG TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1603I   **data UNEXPECTED RECORD FOUND IN PAGESEG** *page segment*

Explanation: Unexpected or unknown record or data (*data*) was detected within the page segment.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the page segment is not corrupted.

AOX1604I   IOB ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1605I   INVALID TRIPLET LENGTH FOUND

Explanation: An unknown MO:DCA Data Descriptor triplet was detected. The structured field cannot be recognized.

System Action: Processing continues without this resource.

User Response: Verify that the AFP object has been generated correctly.

AOX1606I   IOB TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1607W   INVALID UNITS IN IO

Explanation: An incorrect unit base value was identified in an IOCA image.

System Action: The job referring to the named resource will not be printed, and was marked as unprintable.

User Response: The IOCA image is corrupted, and cannot be used for printing.

AOX1608I   UNSUPPORTED OBJECT *type*

Explanation: An unsupported AFP Include Object type was detected. The unsupported object type is *type*. Supported include object type identifiers are: include page segments, overlays, GOCA, BCOCA, image, and include other.

System Action: Printing of the current data set continues.

User Response: Remove the unsupported object from the print output and resubmit the print job.

AOX1609W   INCLUDE OBJECT STRUCT TOO SHORT

Explanation: A processing error was encountered. A MO:DCA **Include Object** structured field contains data less than 26 bytes long.

System Action: The output job producing the error is

ended, and processing continues.

User Response: Validate that the print output contains a valid AFP **Include Object** structured field, and resubmit the job if necessary.

AOX1610I   *command* UNEXPECTED RECORD FOUND IN OBJECT *object*

Explanation: An unexpected AFPDS command was detected in an include object.

System Action: Processing continues, and the command is ignored.

User Response: Verify that the resource has not been corrupted and has been created correctly.

AOX1611I   BARCODE ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1612W   INVALID UNITS IN BARCODE

Explanation: A bar code object contained an incorrect unit base value.

System Action: The job is ended.

User Response: Correct the supplied bar code object.

AOX1613W   INVALID BDD RECORD

Explanation: Expected data is missing in the Bar code Data Descriptor (BDD) Record.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the error in the bar code and resubmit the print job.

AOX1614W   UNKNOWN BARCODE *number*

Explanation: Bar code type *number* is not supported.

System Action: This bar code type will not be printed.

User Response: Verify that the bar code type is specified correctly, and resubmit the print job if required.

AOX1615I   BARCODE TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1616I   *data* **UNEXPECTED RECORD FOUND IN BARCODE**

Explanation: Unexpected or unknown record or data *data* was detected within the bar code.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1617W   **CHARACTER NOT VALID** *character* **IN 3 OF 9 BARCODE**

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data, and resubmit the print job.

AOX1618W   **INVALID MODIFIER IN 3 OF 9 BARCODE**

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1619W   **CHARACTER NOT VALID** *character* **IN CODABAR**

Explanation: Supplied codabar (2 of 5) bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job as required.

AOX1620W   **INVALID MODIFIER IN CODABAR**

Explanation: An incorrect codabar (2 of 5) bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1621W   **CHARACTER NOT VALID** *character* **IN CODE128**

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1622W   **CHARACTER NOT VALID** *value* **IN CODE128 CODE A**

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1623W   **CHARACTER NOT VALID** *character* **IN CODE128 CODE B**

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1624I   **INVALID MODIFIER IN CODE128**

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1625W   **CHARACTER NOT VALID IN MSI BARCODE**

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1626W   **INVALID MODIFIER IN MSI BARCODE**

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly

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AOX1627W   MODULUS 11 RESULT IS 10

Explanation: An incorrect bar code checksum has been detected. If you scan this barcode, the result will be incorrect.

System Action: No checksum value was generated for the named bar code. Processing continues.

User Response: Verify that the length of bar code data is correct and resubmit the print job.

AOX1628W   CHARACTER NOT VALID IN 2/5 INDUSTRIAL BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1629W   INVALID MODIFIER IN 2/5 INDUSTRIAL BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1630W   CHARACTER NOT VALID IN 2/5 INTERLEAVED BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1631W   INVALID MODIFIER IN 2/5 INTERLEAVED BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1632W   CHARACTER NOT VALID IN 2/5 MATRIX BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1633W   INVALID MODIFIER IN 2/5 MATRIX BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1634W   CHARACTER NOT VALID IN EAN/UPC 2 BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1635W   INVALID MODIFIER IN EAN/UPC 2 BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1636W   WRONG LENGTH IN EAN/UPC 2 BARCODE

Explanation: The specified bar code data length is incorrect.

System Action: The bar code is ignored and processing continues.

User Response: Ensure that the length specified in the bar code is correct and resubmit the print job.

AOX1637W CHARACTER NOT VALID IN EAN/UPC 5 BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1638W INVALID MODIFIER IN EAN/UPC 5 BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1639W WRONG LENGTH IN EAN/UPC 5 BARCODE

Explanation: The specified bar code data length is incorrect.

System Action: The bar code is ignored and processing continues.

User Response: Ensure that the length specified in the bar code is correct and resubmit the print job.

AOX1640W CHARACTER NOT VALID IN UPC A BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1641W INVALID MODIFIER IN UPC A BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1642W WRONG LENGTH IN UPC A BARCODE

Explanation: The specified bar code data length is incorrect.

System Action: The bar code is ignored and processing continues.

User Response: Ensure that the length specified in the bar code is correct and resubmit the print job.

AOX1643W INVALID UPC-E CODE *text*

Explanation: The bar code UPC-E code cannot be generated due to a bar code data error.

System Action: The bar code is ignored and print job processing continues.

User Response: Verify that the UPC-E bar code data has been specified correctly and resubmit the print job.

AOX1644W CHARACTER NOT VALID IN UPC E BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1645W INVALID MODIFIER IN UPC E BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1646W WRONG LENGTH IN UPC E BARCODE

Explanation: The specified bar code data length is incorrect.

System Action: The bar code is ignored and processing continues.

User Response: Ensure that the length specified in the bar code is correct and resubmit the print job.

AOX1647W CHARACTER NOT VALID IN EAN 13 BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1648W   INVALID MODIFIER IN EAN 13 BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1649W   WRONG LENGTH IN EAN 13 BARCODE

Explanation: The specified bar code data length is incorrect.

System Action: The bar code is ignored and processing continues.

User Response: Ensure that the length specified in the bar code is correct and resubmit the print job.

AOX1650W   CHARACTER NOT VALID IN EAN 8 BARCODE

Explanation: Supplied bar code data is incorrect. The range of valid data is dependent on the bar code type.

System Action: The bar code is ignored and print job processing continues.

User Response: Correct the bar code data and resubmit the print job.

AOX1651W   INVALID MODIFIER IN EAN 8 BARCODE

Explanation: An incorrect bar code modifier has been detected.

System Action: Processing continues without the bar code.

User Response: Verify that the bar code has not been corrupted and has been created correctly.

AOX1652W   WRONG LENGTH IN EAN 8 BARCODE

Explanation: The specified bar code data length is incorrect.

System Action: The bar code is ignored and processing continues.

User Response: Ensure that the length specified in the bar code is correct and resubmit the print job.

AOX1653W   INTERNAL ERROR IN DRAW01 *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1654W   INTERNAL ERROR IN DRAW02 *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1655W   INTERNAL ERROR IN DRAW09 *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1656W   INTERNAL ERROR IN DRAW0A *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1657W   INTERNAL ERROR IN DRAW0B *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1658W INTERNAL ERROR IN DRAW0C *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1659W INTERNAL ERROR IN DRAW18 *data*

Explanation: An internal program error has occurred during bar code processing.

System Action: Processing of bar codes was ended.

User Response: Retry the print job. If this error persists, perform an AFP to PCL, AFP to PDF, or AFP to PostScript transform trace (with the ALL option), and report this error to an IBM service representative.

AOX1660W BARCODE OUTSIDE LOGICAL PAGE ON PAGE *pp*

Explanation: Draw Barcode commands placed the bar code outside the logical page.

System Action: The bar code on the indicated page will not be printed.

User Response: Ensure that the logical page area matches the input data placement.

AOX1661W CHARACTER NOT VALID IN RM4SCC BARCODE

Explanation: The character specified in the royal mail 4SCC bar code is not valid.

System Action: The bar code on the indicated page will not be printed.

User Response: Ensure that the encoding information for the requested bar code is correct and resubmit the print job.

AOX1662W INTERNAL ERROR IN DRAW1A *character*

Explanation: The character (*character*) specified in the bar code is not valid.

System Action: Processing of bar codes is ended.

User Response: Resubmit the print job. If this error persists, perform an AFP transform trace (ALL), and report this error to an IBM service representative.

AOX1663I EXTERNAL ALGORITHM LENGTH ERROR

Explanation: A JPEG image object contains an encoding length error.

System Action: The print job ends.

User Response: Correct the error and resubmit the print job.

AOX1664W INVALID OBJECT ORIENTATION FOUND IN BCOCA *orientation*

Explanation: A bar code object contains an unsupported orientation specification.

System Action: The bar code is printed with 0-degree rotation.

User Response: Verify that the orientation you want to print is supported.

AOX1665I EPG TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1670I CTB ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1671I CTB TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1672I *data* **UNEXPECTED RECORD IN PRESENTATION TEXT**

Explanation: Unexpected or unknown record or data *data* was detected within the presentation text.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the presentation text data is not corrupted.

AOX1673W   SOSI FONT NOT FOUND

Explanation: A shift-in shift-out command was specified but the named font could not be found. No font has been supplied with the print job for the requested shift operation.

System Action: Processing continues without the font resource.

User Response: Verify that a font has been supplied for the shift operation, either in the page definition, or by using the CHARS option.

System Programmer Response: If this font is located in a system resource library, specify the resource library in the transform configuration file. Refer to *z/OS Infoprint Server Customization* for information about the transform configuration file.

AOX1674I   INVALID TEXT CONTROL SEQUENCE FOUND *nnnn*

Explanation: A MO:DCA Text control structured field in the input data stream contains an incorrect command sequence or length field less than two.

System Action: Processing continues but ignores the PTOCA record.

User Response: Correct the incorrect input member.

AOX1675I   FONT NUMBER *nnn* **NOT FOUND**

Explanation: The specified PTOCA Set Coded Font Local font ID*nnn* could not be found. The named font cannot be mapped.

System Action: Font number *nnn* will not be used. Printing continues with the default font.

User Response: An incorrect MO:DCA MCF command has been encountered that refers to a font that has not been mapped. Verify that the document has been created correctly.

System Programmer Response: If this font is located in a system resource library, specify the resource library in the transform configuration file. Refer to *z/OS Infoprint Server Customization* for information about the transform configuration file.

AOX1676I   FONT NUMBER *nnn* **NOT FOUND IN TABLE**

Explanation: An internal program error has occurred.

System Action: The data will be printed with the previously selected font.

User Response: Run an AFP transform trace (ALL), and report this problem to an IBM service representative.

System Programmer Response: Contact an IBM service representative.

AOX1677W   SECTION ID *nn* **IS NOT DEFINED**

Explanation: There was a **map coded font** request, but a double-byte font section ID was not found in the font.

System Action: The print job is ended and processing continues.

User Response: Verify that the section ID*nn* is contained in the supplied double-byte font.

AOX1678I   PRINTER ID *id* **INTERN ID** *id*

Explanation: This internal message is for information only.

System Action: Processing continues.

User Response: None.

AOX1679W   NEGATIVE CHARACTER REMOVED ON PAGE *pp* **DUE TO VALUE OF** *-nnn* **DOTS**

Explanation: A character placed outside of the page area was removed on page number *pp* and will not be printed.

System Action: The character is removed and processing continues.

User Response: Remove the characters, or adjust the placement of characters so they can be printed.

AOX1681I   FDEF ENTERED MEDIUM MAP *map*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1682W   FORMDEF IS MISSING IN PARM

Explanation: The MO:DCA Invoke Data Map structured field was included in the input data stream; however, a form definition was not supplied to the transform.

System Action: Processing for the current print job is ended.

User Response: Ensure that the form definition including the required copy subgroup data map is supplied to the AFP to PCL, AFP to PDF, or AFP to PostScript transform program.

**AOX1683W INVALID PAGE POSITION TYPE 2
FOUND**

Explanation: An incorrect page position command
was detected within a form definition.

System Action: Processing continues using page
position 0,0.

User Response: Correct the form definition.

AOX1684W INVALID MPO STRUCTURED FIELD *rrrr*
llll

Explanation: A MO:DCA map page overlay structured
field is not valid (that is, a length field does not match
the supplied data). The length of the MPO triplet was
rrrr, and a value of *llll* was expected.

System Action: Processing continues.

User Response: Adjust the MO:DCA MPO structured
field length and rerun the job.

AOX1685W MEDIUM MAP *mapname* **NOT FOUND
IN** *formdef*

Explanation: The specified medium map could not be
found in the form definition *formdef*.

System Action: Processing for the current print job is
ended.

User Response: Check that the correct form definition
has been supplied and that the medium map is
contained within the form definition.

AOX1686I FDEF TERMINATED. *member mapname*
ACTIVE RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to
PostScript transform trace program issues this message
to indicate its progress.

System Action: Processing continues.

User Response: None.

**AOX1687W INVALID MAP MEDIUM OVERLAY
LENGTH IN FORMDEF**

Explanation: A MO:DCA map medium overlay
contains a length field that does not match the supplied
data.

System Action: Processing continues.

User Response: Adjust the MO:DCA MMO structured
field and rerun the print job.

AOX1688I *data* **UNEXPECTED RECORD FOUND IN
FORMDEF** *form definition*

Explanation: Unexpected or unknown record or data
data was detected within the form definition.

System Action: Processing of the print job continues,
and the named data record is ignored.

User Response: Verify that the resource has not been
corrupted and has been created correctly.

AOX1689I LINE ENTERED AT LINE *nnn* **NEWPAGE
=** *yes/no*

Explanation: The AFP to PCL, AFP to PDF, or AFP to
PostScript transform trace program issues this message
to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1690W INVOKE1 TRUE

Explanation: A severe program logic error has
occurred.

System Action: Processing ends.

User Response: Contact an IBM service
representative.

AOX1691I SENDLINE, ARG = *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to
PostScript transform trace program issues this message
to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1692I COND *b0 b1 medium mmac datamap
dmac*

Explanation: The AFP to PCL, AFP to PDF, or AFP to
PostScript transform trace program issues this message
to indicate the progress of a conditional processing
scan.

System Action: Processing continues.

User Response: None.

AOX1693I MATCH FOUND ON LINE *nnn*

Explanation: A conditional processing search
argument has been satisfied on line *nnn*.

System Action: Processing continues.

User Response: None.

AOX1694I   SCANDOC ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1695I   SCANDOC TERMINATED. CONDITION IS TRUE.

Explanation: Conditional processing is completed. The set conditions have been met.

System Action: Processing continues.

User Response: None.

AOX1696I   SCANDOC TERMINATED

Explanation: Conditional processing is completed. The set conditions have not been met.

System Action: Processing continues.

User Response: None.

AOX1697I   INVOKE CALLED IMM = *mapname* **IDM =** *dataname*

Explanation: This information-only message indicates that the specified medium map and data map have been activated as a result of conditional processing.

System Action: Processing continues.

User Response: None.

AOX1698I   INVOKE DATA MAP ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1699I   INVOKE MEDIUM MAP ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1700W   CONSTANT FORM AFTER CONDITIONAL INVOCATION OF *formdef*

Explanation: An incorrect request for a constant form was processed in the form definition *formdef*.

System Action: Printing of the document ends.

User Response: Verify that the requested form definition is valid.

AOX1701I   LINE TERMINATED AT LINE *line*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1702I   BARCODE ID *id* **NOT FOUND**

Explanation: The bar code line check references an unknown bar code ID.

System Action: This bar code type will not be printed.

User Response: Verify that the bar code type is specified correctly. Resubmit the print job if necessary.

AOX1703I   TOP OF FORM ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1704I   MCF ENTERED. FONT *fontname* *codepage* **AS** *nnn*

Explanation: The Map Coded Font processing routine has been invoked for the named font, using the named code page. *nnn* is the internal ID assigned to the font.

System Action: Processing continues.

User Response: None.

AOX1705W   INVALID FONT CONTROL FOUND IN FONT *font*

Explanation: An AFPDS font control command in the input data stream contains an invalid unit base.

System Action: Processing for the current print job is ended.

User Response: Correct the unit base in the font reference.

AOX1706W   RELATIVE FONT CONTROL TOO SMALL IN FONT *font*

Explanation: Expected data is missing in the relative font FNC record.

System Action: Processing for the current print job is ended.

User Response: Correct the error in the font and resubmit the print job.

AOX1707W   THERE IS NO RASTER IN FONT *font*

Explanation: The named font does not contain any character raster. This font cannot be used for printing.

System Action: Processing for the current print job is ended.

User Response: Select other fonts that contain a raster pattern in the font.

AOX1711I   WRONG RESOLUTION FOUND IN FONT *font* **RES** *resolution*

Explanation: The resolution of font *font* is not 300 pels.

System Action: Processing continues.

User Response: Ensure that the named font has a resolution of 300 pels (X'0BB8', in 1/10 inch).

AOX1712W   *data* UNEXPECTED RECORD IN FONT *font*

Explanation: Unexpected or unknown record or data *data* was detected within the font.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the font has not been corrupted and has been created correctly.

AOX1713W   *data* UNEXPECTED RECORD IN CODE PAGE *code page*

Explanation: Unexpected or unknown record or data *data* was detected within the code page.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the code page has not been corrupted and has been created correctly.

AOX1714I   CHARACTER *character id* **NOT FOUND IN FONT** *font* **WITH** *code page*

Explanation: The character ID named was not in the specified font.

System Action: The transform used a substitute character for *character id*. The substitute character, which is used for unprintable characters, is defined in font *font*. Processing continues.

User Response: Verify that the font and code page combination is valid and all required characters are current in the font.

AOX1715I   FONT *codepage charset* **AS** *nnn* **ACTIVE**

Explanation: A coded font has been generated from the named code page and character set. *nnn* is the internal ID assigned to the coded font.

System Action: Processing continues.

User Response: None.

AOX1716I   REMOTE FONT *codepage charset* **AS** *nnn* **ACTIVE**

Explanation: A coded font has been generated from the named code page and character set. *nnn* is the internal ID assigned to the coded font.

System Action: Processing continues.

User Response: None.

AOX1717I   MCF TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1718W   ORIENTATION *orientation* **NOT FOUND IN FONT** *font*

Explanation: A request to use font *font* with orientation *orientation* failed, because the font does not contain this orientation.

System Action: Printing of the indicated job is ended.

User Response: Verify the specified font resource is available in the requested orientation.

AOX1719I   MCF1 TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1720W   INVALID SECTION *x* **IN FONT** *font name code page*

Explanation: An incorrect section ID was contained in the named font used with the supplied code page.

System Action: The output job producing the error is ended and processing continues.

User Response: Check that the font resource is not corrupted or incorrect for use with the print job.

AOX1721W INVALID BLANK FONT NAME FOUND IN MAP CODED FONT

Explanation: An incorrect MO:DCA MCF structured field was specified.

System Action: The output job producing the error is ended and processing continues.

User Response: Check that the MO:DCA MCF structured field refers to a valid font and is not blank or has been truncated.

AOX1722I MCF1 TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1723W *data* UNEXPECTED RECORD IN CODED FONT *font*

Explanation: Unexpected or unknown record or data *data* was detected within the font.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the font has not been corrupted and has been created correctly.

AOX1724W MORE THAN *nnn* **FONTS IN USE**

Explanation: Too many fonts are being used for this job. You can have 127 fonts with PCL4 printers, 512 fonts with PCL5 printers, and at most 127 DBCS fonts.

System Action: Printing of this job is interrupted.

User Response: Verify that the document does not use more than the allowed number of fonts.

AOX1725I MCF2 ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1726W INVALID MCF2 TRIPLE *nnnn*

Explanation: An unknown MO:DCA Map Coded Font 2 triplet was detected. The structured field cannot be recognized.

System Action: Processing continues without this font.

User Response: Verify that the font has been generated correctly.

AOX1727W CPGID *xxx* **NOT FOUND IN TABLE**

Explanation: A code page identifier could not be found internally in the program.

System Action: Processing continues without this code page.

User Response: Use another code page or supply the named code page.

AOX1728W FGID *xx* **NOT FOUND IN TABLE**

Explanation: A font identifier could not be found internally in the program.

System Action: Processing continues without this font.

User Response: Use another font or supply the named font.

AOX1729W INVALID FULLY QUALIFIED NAME *xxx*

Explanation: An incorrect MCF2 qualifier was detected. The MCF Triplet X'02' was expected containing a code page, font name or coded font name.

System Action: Processing ends.

User Response: Verify that the type 2 coded font is not corrupted or not valid.

AOX1730II MCF2 TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1731I MAP OVLY ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1732W MORE THAN *xxx* **OVERLAYS IN USE**

Explanation: The document used more that 255 overlays.

System Action: The job is ended.

User Response: Ensure that the document uses fewer than 255 overlays.

AOX1733I   MAP OVLY TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1734I   LOAD OVLY ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1735I   OVERLAY *overlayname* **LOADED AS**
              nnn

Explanation: The named overlay has been loaded with internal overlay number *nnn*.

System Action: Processing continues.

User Response: None.

AOX1736W   OVERLAY FONT *font* **NOT FOUND**

Explanation: A font specified within an overlay could not be found in a supplied font library or user library.

System Action: The job ends.

User Response: The named font from the overlay input could not be found. Add the font to a defined library, or add the missing library.

System Programmer Response: If this font is located in a system resource library, specify the resource library in the transform configuration file. Refer to *z/OS Infoprint Server Customization* for information about the transform configuration file.

AOX1738I   LOAD OVERLAY TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1740W   INVALID UNITS IN PAGE DESCRIPTOR

Explanation: An incorrect unit base value was identified in an overlay or page segment resource.

System Action: The job referring to the named resource will not be printed.

User Response: The named resource type is corrupted and cannot be used for printing. Use the IO

transform trace option to determine the resource type of the failing resource.

AOX1741W   data UNEXPECTED RECORD FOUND IN
              OVERLAY *overlay*

Explanation: Unexpected or unknown record or data *data* was detected within the overlay.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the overlay has not been corrupted and has been created correctly.

AOX1742W   COPY OVERLAY ID *xxxx* **NOT MAPPED**

Explanation: The document attempted to use an Include Page Overlay or Floating Overlay that had not previously been mapped.

System Action: Processing continues without the named overlay.

User Response: Ensure that the specified overlay is available to the print job, and resubmit the job.

AOX1743I   COPY OVERLAY *overlayname*
              ACTIVATED, ID = *nnn*

Explanation: The named overlay has been activated with internal ID *nnn*.

System Action: Processing continues.

User Response: None.

AOX1744I   PAGE OVERLAY *name* **NOT MAPPED**

Explanation: The document attempted to use an Include Page Overlay or Floating Overlay overlay that had not previously been mapped.

System Action: Processing continues without the named overlay.

User Response: Ensure that the specified overlay is available to the print job, and resubmit the job.

AOX1745I   PAGE OVERLAY *overlayname*
              ACTIVATED, ID = *nnn*

Explanation: The named page overlay has been activated with internal ID *nnn*.

System Action: Processing continues.

User Response: None.

AOX1747W   MORE THAN *nnn* **OVERLAYS IN USE**

Explanation: Too many overlays are being used within the print job.

System Action: Printing of this job is interrupted.

User Response: Verify that there are no more than 255 overlays referenced in the print job.

AOX1748I   PDEF ENTERED DATA MAP = *map*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1749W   NO MEMORY FOR CCP RECORDS

Explanation: Insufficient storage was available for conditional processing records (CCP). A maximum of 32k may be used for conditional processing records.

System Action: Conditional data will not be processed.

User Response: Reduce the complexity of the conditional processing operations, and resubmit the print job.

AOX1750W   INVALID UNITS IN PAGE DESCRIPTOR

Explanation: An incorrect unit base value was identified in an overlay or page segment resource.

System Action: The job referring to the named resource will not be printed.

User Response: The named resource type is corrupted and cannot be used for printing. Use the IO transform trace option to determine the resource type of the failing resource.

AOX1752W   INVALID TRIPLETS LENGTH FOUND

Explanation: An incorrect length value was detected on a MO:DCA triplet. The command cannot be recognized.

System Action: Processing continues without this resource.

User Response: Refer to the additional program messages that may identify this resource. Verify that the resource has been generated correctly.

AOX1753W   INVALID MPO STRUCTURED FIELD
                field data

Explanation: An error within the MO:DCA Map Page Overlay (MPO) structured field was encountered.

System Action: The supplied MPO will not be used.

User Response: Verify that the MO:DCA MPO structured field is coded correctly.

AOX1754W   DATA MAP *mapname* **NOT FOUND IN**
                pagedefinition

Explanation: The MO:DCA data map *mapname* could not be found in the input data stream page definition.

System Action: Processing for the current print job ends.

User Response: Ensure that the Data Map mapname specified is supplied in the page definition and is accessible.

AOX1755I   PDEF TERMINATED *pdefname datamap*
                ACTIVE RC = *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1756W   *data* UNEXPECTED RECORD FOUND IN
                PAGEDEF

Explanation: Unexpected or unknown record or data *data* was detected within the page definition.

System Action: Processing of the print job continues, and the named data record is ignored.

User Response: Verify that the page definition has not been corrupted and has been created correctly.

AOX1757W   TYPE 1 FONT *font* NOT SUPPORTED
                BY PRINTER

Explanation: An attempt to print using an outline font has been rejected. The font was not found, or the transform does not support outline fonts.

System Action: The document will not be printed.

User Response: Ensure that the correct AFP transform and printer is being used in conjunction with printing of AFP outline fonts. The AFP to PCL transform does not support outline fonts. Ask your system administrator to enable mapping of outline to raster fonts for the AFP to PCL transform. If an equivalent raster font is not available for this outline font, either print the document on a printer that supports scalable fonts (for example, Postscript or PDF output), or change the original document to eliminate references to outline fonts.

The input data might use an outline font that is anamorphically scaled in the Map Coded Font structured field. Check the Map Coded Font structured field.

System Programmer Response: Enable font mapping for the AFP to PCL transform in the AOP_FONTMAP variable in the transform configuration

file. For information about the format of the aopxfd.conf command, refer to *z/OS Infoprint Server Customization* or see the **man** page for the aopxfd.conf file.

AOX1772W   TYPE *y* EXPECTED *x* FOUND

Explanation: An include object belongs to a different type than the type specified. Type *y* was requested, but the object type is *x*.

System Action: Processing ends.

User Response: Examine and correct the include object statement in the output file to ensure that the specified object type matches the actual object data. Resubmit the print job if necessary.

AOX1773W   UNKNOWN OBJECT

Explanation: An unknown object container type was encountered.

System Action: Processing ends.

User Response: Ensure that the AFP transform supports the object type. Convert the object to a supported format if necessary, and resubmit the print job.

AOX1774I   OC ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1775W   WRONG CDD LENGTH

Explanation: An incorrect length on a data description was encountered during object container processing.

System Action: The current object container is processed.

User Response: The Container data description field must be 12 bytes long. Ensure that the supplied Object container does not contain an error on the data descriptor, and resubmit the print job if necessary.

AOX1776I   OC TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1777I   JFIF OBJECT ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1778I   SCANNING JFIF MARKER *xx*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate the progress of JFIF image processing.

System Action: Processing continues.

User Response: None.

AOX1779I   UNSUPPORTED JFIF MARKER *x*

Explanation: An unsupported JFIF (or JPEG) marker type was encountered.

System Action: Processing of the current JFIF object ends.

User Response: The requested marker type is not supported by transform. Specify an alternate marker type that is supported.

AOX1780I   JFIF VERSION *version*

Explanation: Indicates the JFIF version level.

System Action: Processing continues.

User Response: None.

AOX1781I   ADOBE VERSION *version*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this internal message.

System Action: Processing continues.

User Response: None.

AOX1782I   QUANT TABLE *q*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this internal message.

System Action: Processing continues.

User Response: None.

AOX1783I   SAMPLES IN SOS *x* DOES NOT MATCH SOF *y*

Explanation: An error has occurred during JFIF (or JPEG) file processing due to a mismatch of JFIF values.

System Action: Processing of the current JFIF object is ended.

User Response: Correct the encoding error in the supplied JFIF image, and resubmit the print job if necessary.

AOX1784I NON INTEGER FILL FOUND

Explanation: A JFIF image contains invalid subsampling values.

System Action: Processing ends.

User Response: Correct the encoding error in the supplied JFIF image and resubmit the print job.

AOX1785I HUFFMAN TABLE *h*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this internal message during image processing.

System Action: Processing continues.

User Response: None.

AOX1786I INVALID LENGTH IN HUFFMAN TABLE

Explanation: An incorrect length in a Huffman encoding table was detected during image processing.

System Action: Processing of the current image object is ended.

User Response: The image being processed contains an encoding error. Use the AFP to PCL, AFP to PDF, or AFP to PostScript transform trace function to determine the name of the image in error. Correct the input image (JFIF, JPEG, or TIFF), and resubmit the print job if necessary.

AOX1787I UNEXPECTED EOF

Explanation: An unexpected end-of-file indicator was detected during image processing.

System Action: Processing of the current image object ends.

User Response: The image being processed contains an encoding error. Correct the input image (JFIF, JPEG, or TIFF), and resubmit the print job if necessary.

AOX1788I INVALID LENGTH IN MARKER

Explanation: An incorrect length in an image marker was detected during image processing.

System Action: Processing of the current image object is ended.

User Response: The image being processed contains an incorrect marker length. Use the AFP to PCL, AFP to PDF, or AFP to PostScript transform trace function to determine the name of the image in error. Correct the

input image (JFIF, JPEG, or TIFF), and resubmit the print job if necessary.

AOX1789I JFIF OBJECT TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1790I TIFF OBJECT ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate the progress of TIFF image processing.

System Action: Processing continues.

User Response: None.

AOX1791I READING TIFF TAG *tag*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate the progress of TIFF image processing.

System Action: Processing continues.

User Response: None.

AOX1792I IFD TAG *tag* **TYPE** *type* **NR** *nr* **VALUE** *nnnn*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate the progress of TIFF image processing.

System Action: Processing continues.

User Response: None.

AOX1793I ERROR FOUND IN TIFF OBJECT

Explanation: An error was detected during TIFF image processing.

System Action: Processing of the current image object is ended.

User Response: Use the AFP to PCL, AFP to PDF, or AFP to PostScript transform trace function to determine more information about this error.

AOX1794I TIFF OBJECT TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate the progress of TIFF image processing.

System Action: Processing continues.

User Response: None.

AOX1795I   *hexadecimal and ascii data*

Explanation: This message contains hexadecimal and ASCII dump data.

System Action: Processing continues.

User Response: None.

AOX1796I   **COMPONENT NOT FOUND IN TABLE** *id*

Explanation: The start of JPEG scanning has encountered the undefined component *id*.

System Action: Printing of the document ends.

User Response: Verify that the JPEG image is valid.

AOX1797W   **INVALID OBJECT ORIENTATION FOUND IN PTOCA** *orientation*

Explanation: A presentation text object contains an unsupported orientation.

System Action: The presentation text object is printed with 0-degree rotation.

User Response: Verify that the orientation you want to print is supported.

AOX1798W   **INVALID OBJECT ORIENTATION FOUND IN BEGIN DATA MAP** *orientation*

Explanation: A data map contains an unsupported orientation.

System Action: The data is printed with 0-degree rotation.

User Response: Verify that the orientation you want to print is supported.

AOX1800I   **UNSUPPORTED COLOR TABLE**

Explanation: An unsupported request for a color table was detected during color image processing.

System Action: Processing of the current image object is ended.

User Response: The requested color table structured field is not supported.

AOX1801I   **UNSUPPORTED NUMBER OF BANDS**

Explanation: An unsupported request for a number of bands was detected during color image processing.

System Action: Processing of the current image object is ended.

User Response: The requested command is not supported.

AOX1802I   **UNSUPPORTED NUMBER OF SAMPLES IN** *band*

Explanation: An unsupported request for a number of samples in color band processing was detected in a color image.

System Action: Processing of the current image object is ended.

User Response: The requested command is not supported.

AOX1803I   **UNSUPPORTED COLOR SPACE** *n*

Explanation: An unsupported request for a color space was detected in a color image.

System Action: Processing of the current image object is ended.

User Response: Request a supported color space. AFP to PCL, AFP to PDF, and AFP to PostScript transforms support RGB, CRB, CMYK, CIELAB, and printer-specific color spaces only.

AOX1804I   **UNSUPPORTED NUMBER OF SAMPLES**

Explanation: An unsupported request for a number of samples in color processing was detected in a color image.

System Action: Processing of the current image object ends.

User Response: Correct the command to request an integer number of samples.

AOX1805I   **ONLY 8,8,8 SAMPLE SUPPORTED IN COLOR** *n*

Explanation: An unsupported request for a number of samples in color processing was detected in a color image.

System Action: Processing of the current image object is ended.

User Response: The requested number of sample requests is not supported. This message indicates the number of samples that are supported and accompanies message AOX1804.

AOX1806I   **ERROR FOUND IN SUBSAMPLE RATIOS STRUCT**

Explanation: An unsupported request for a number of sub-samples was detected in a color image. The number of subsamples must be the same as the number of samples.

System Action: Processing of the current image object ends.

User Response: Correct the image input, and resubmit the print job if required.

AOX1807W OBJECT AREA TOO LARGE

Explanation: An error was detected in processing an object area that exceeds the supported area size.

System Action: Processing of the current object ends.

User Response: The largest object area that can be processed is 20 × 30 inches. Reduce the size of the object area to match this value, and resubmit the print job if required.

AOX1808I   JFIF MARKER FOUND IN PICTURE *nn*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1809I   LZW CODE ERROR CODE *nn* **A0** *nnnn*
OLDCODE *oooo*

Explanation: An error has been detected in LZW encoding in a supplied image.

System Action: Processing of the current image object ends.

User Response: Ensure that the image has not been corrupted or altered. Use the AFP to PCL, AFP to PDF, or AFP to PostScript transform trace function to identify the name of the image in error. Correct the image input, and resubmit the print job if required.

AOX1810I   SAMPLE/PIXEL 1, BITS/SAMPLE *n*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this information-only message.

System Action: Processing continues.

User Response: None.

AOX1811I   SAMPLE/PIXEL 3, BITS/SAMPLE *x y z*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this information-only message.

System Action: Processing continues.

User Response: None.

AOX1812I   COLOR SPACE *c*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this information-only message.

System Action: Processing continues.

User Response: None.

AOX1813I   COLOR PALETTE IN USE

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this information-only message.

System Action: Processing continues.

User Response: None.

AOX1814I   SUB SAMPLE (*xx,yy***) FILL (***aa,bb***)**

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this information-only message.

System Action: Processing continues.

User Response: None.

AOX1815I   DOC ENTERED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1816I   DOC TERMINATED RC *rc*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1820W OPEN FAILED *cccc***,** *code*

Explanation: An attempt to open a file in the Hierarchical File System (HFS) failed. The command *cccc* ended with error code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using the appropriate IBM-supplied publications.

AOX1821W   CLOSE FAILED *cccc*, *code*

Explanation: An attempt to close a file in the Hierarchal File System (HFS) failed. The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1825I   SAMPLE/PIXEL 4, BITS/SAMPLE *a,b,c,d*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this information-only message.

System Action: Processing continues.

User Response: None.

AOX1900W   ACCEPT RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1901I   READFILE CALLED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1902I   READFILE TERMINATED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1903I   DELETE FILE CALLED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1904I   DELETE FILE TERMINATED

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform trace program issues this message to indicate its progress.

System Action: Processing continues.

User Response: None.

AOX1905W   DELETE RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1906W   OPENW RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1907W   OPENR RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1908W   MKDIR RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error,

examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1909W   CLOSE RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1910W   WRITE RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1911W   READ RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1912W   SEEK RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1913W   READ RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1914W   WRITE RC *cccc* **REASON** *code*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Use of the HFS is not possible. The print job ends, and processing continues.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1915I   USE OF THIS PRODUCT IS NOT ENABLED

Explanation: An attempt was made to start the AFP to PCL, AFP to PDF, or AFP to PostScript transform; however, the product has not been enabled.

System Action: The AFP transform ends.

User Response: Notify your system programmer.

System Programmer Response: Enable the AFP to PCL, AFP to PDF, or AFP to PostScript transform and restart the Transform Manager. Refer to *z/OS Infoprint Server Customization* for information about how to enable the Infoprint Server Transforms.

AOX1916W   AOX SHUTDOWN COMPLETE

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform has ended after an abend or after message AOX1915I.

System Action: Processing ends.

User Response: After message AOX1915I, see that message. After an abend, see message AOX1998W.

AOX1917W   RETURN TRUE ERROR READ

Explanation: An error occurred in reading from **stdin**.

System Action: Processing ends.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1918W PROBLEMS WITH FILE *filename*

Explanation: An error occurred during an I/O operation in the Hierarchal File System (HFS). The file in error is *filename*.

System Action: Processing ends.

User Response: To identify the cause of this error, examine the return code from the HFS command using *z/OS UNIX System Services Messages and Codes*.

AOX1920I GETMAIN FAILED *message*

Explanation: The AFP to PCL, AFP to PDF, or AFP to PostScript transform was unable to obtain storage for the printer log.

System Action: Printing continues, but error information is sent to the printer or **stderr** output. No log data is recorded.

User Response: Analyze the **stderr** output and relevant printer logs and error information to determine the cause of the failure. Try to increase the region size for the transform. Contact an IBM service representative if a program error is found.

AOX1921I OPEN FAILED *return code* **REASON** *rrrr*

Explanation: An I/O error in the hierarchical file system (HFS) occurred when the AFP to PCL, AFP to PDF, or AFP to PostScript transform opened the log file. The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Printing continues, but error information is sent to the printer or **stderr** output. No log data is recorded.

User Response: Look up the return code in *z/OS UNIX System Services Messages and Codes* to determine the cause of this error.

AOX1922I WRITE FAILED *return code* **REASON** *rrrr*

Explanation: An I/O error in the hierarchical file system (HFS) occurred while the AFP to PCL, AFP to PDF, or AFP to PostScript transform was writing to the log file. The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Printing continues, but error information is sent to the printer or **stderr** output. No log data is recorded.

User Response: Look up the return code in *z/OS UNIX System Services Messages and Codes* to determine the cause of this error.

AOX1923I CLOSE FAILED *return code* **REASON** *rrrr*

Explanation: An I/O error in the hierarchical file system (HFS) occurred when the AFP to PCL, AFP to PDF, or AFP to PostScript transform closed the log file. The command ended with the decimal return code *cccc* and hexadecimal reason code *code*.

System Action: Printing continues, but error information is sent to the printer or **stderr** output. No log data is recorded.

User Response: Look up the return code in *z/OS UNIX System Services Messages and Codes* to determine the cause of this error.

AOX1925W WRITE STDERR FAILED *return code* **REASON** *reason code*

Explanation: An I/O error in the hierarchical file system (HFS) occurred while the AFP to PCL, AFP to PDF, or AFP to PostScript transform was writing to **stderr**. The command ended with the decimal return code *return code* and hexadecimal reason code *reason code*.

System Action: Printing continues, but error information is lost.

User Response: Look up the return code in *z/OS UNIX System Services Messages and Codes* to determine the cause of this error.

AOX1998W MODULE = *module* **ABEND CODE =** *code* **ON** *xxxxxxxxx*

AFP TRANSFORM VERSION=*version*
PS, PCL, PDF TRANSFORM VERSION=*vvvvv*
PSW=*xxxxxxxx xxxxxxxx*
START=*xxxxxxxx* **OFFSET=***xxxxxxx*
GENERAL REGISTERS R0REG 0- 3 *reg0 reg1 reg2 reg3*–**R15**
REG 4 - 7*reg4 reg5 reg6 reg7*
REG 8 - 11*reg8 reg9 reg10 reg11*
REG 12 - 15*reg12 reg13 reg14 reg15*
**ABEND OCCURRED
    BEFORE AOX CODE
ABEND OCCURRED
    AFTER AOX CODE
ABEND OCCURRED IN** *module*
OFFSET *nnnnnn*

Explanation: A program abend occurred for the AFP to PCL, AFP to PDF, or AFP to PostScript transform.

System Action: The AFP transform ends.

User Response: Analyze the **stderr** output and relevant printer logs and error information to determine the cause of the failure. Contact an IBM service representative if a program error is found.

User Abend Codes

The AFP to PCL, AFP to PDF, and AFP to PostScript transforms can issue a user abend with the following code.

0023

Explanation: SVC 35 (WTO) failed.

System Action: The transform issues message AOX1925W and ends abnormally. The Infoprint Server Transform Manager attempts to restart the transform when the next transform request is received.

System Programmer Response: Capture the dump, save the abend information from the operator console, and contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Chapter 4. NetSpool Messages and Codes

This chapter describes the messages, return codes, and sense codes issued by NetSpool.

Message Format

The messages have an eight-character message identifier followed by *jobname.identifier* and message text, as shown below:

API*nnnnt jobname.identifier* **MESSAGE TEXT**

or

API*nnnnt jobname,***ASID=***nnnn* **MESSAGE TEXT**

API	Identifies NetSpool messages
nnnn	Four-digit message number
t	One-character type code

Type code	Meaning
A	Operator action is required.
E	An error occurred.
I	Information message.
W	A warning situation occurred.

jobname	NetSpool job name or procedure name
identifier	Field qualifying the NetSpool procedure name
ASID=*nnnn*	NetSpool's address space ID. This format is used when NetSpool is started using a method other than the MVS™ START command.

Messages

API0800I   *jobname.identifier* **STARTING NETSPOOL**

Explanation: NetSpool has been started.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API0801I *jobname.identifier*   **TERMINATING NETSPOOL**

Explanation: NetSpool is stopping.

System Action: NetSpool stops.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API0804E *jobname.identifier*   **The timer is not working.**

Explanation: A timer used by NetSpool is not working. This may indicate a programming error.

System Action: Processing continues.

System Programmer Response: If this error results in system problems, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API0805I *jobname.identifier*   *tcb_id* **TASK ABNORMALLY TERMINATED**

Explanation: A NetSpool ESTAE routine detected that a NetSpool task terminated abnormally.

System Action: NetSpool processing terminates abnormally.

System Programmer Response: Save the SDUMP if one was taken, and contact your service representative in the IBM Support Center.

Operator Response: Notify the system programmer.

API0806E *jobname.identifier* **NO PARM FIELD IS SPECIFIED IN THE EXEC STATEMENT.**

Explanation: The EXEC statement for NetSpool does not contain the required PARM field.

System Action: NetSpool processing terminates abnormally.

System Programmer Response: Correct the EXEC statement, and restart the NetSpool program. For more information about the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0807E *jobname.identifier* **THE PARM LIST IN THE EXEC STATEMENT ENDED ABNORMALLY**

Explanation: The operating system was unable to create a parameter list for use by NetSpool. The PARM parameter on the EXEC statement in the NetSpool startup procedure might contain a coding error.

System Action: NetSpool processing ends.

System Programmer Response: Correct any coding errors in the PARM parameter of the EXEC statement in the NetSpool startup procedure. Restart NetSpool.

Operator Response: Notify the system programmer.

API0808E *jobname.identifier* **NO KEYWORD IS SPECIFIED IN THE PARM FIELD IN THE EXEC STATEMENT.**

Explanation: The EXEC statement for NetSpool does not contain a required keyword before the equal sign in the PARM list.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Correct the PARM field on the EXEC statement, and restart the NetSpool program. For more information about the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: No response is necessary.

API0809E *jobname.identifier* **THE KEYWORD IS TOO LONG:** *keyword***.**

Explanation: The EXEC statement for NetSpool contains a keyword in the PARM field that is greater than eight characters.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Correct the PARM field on the EXEC statement, and restart the NetSpool program. For more information about the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0810E *jobname.identifier* **THE KEYWORD IS NOT VALID:** *keyword***.**

Explanation: The EXEC statement for NetSpool contains an invalid keyword in the PARM field.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Correct the PARM field on the EXEC statement, and restart the NetSpool program. For more information about the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0811I *jobname.identifier* **ERROR WHILE TAKING SDUMP. REASON CODE=***reasoncode*

Explanation: A NetSpool ESTAE routine attempted to take an SDUMP. The reason code indicates the reason for the failure.

System Action: NetSpool processing terminates abnormally.

System Programmer Response: If possible, correct the problem indicated in the reason code.

Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API0812E *jobname.identifier* **The parameter specified for the keyword is not valid:** *keyword*

Explanation: The EXEC statement for NetSpool contains a keyword with an incorrect or missing value. This message may be displayed in English even when other messages are translated into a language other than English.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Correct the PARM field on the EXEC statement, and restart the NetSpool program. For more information about the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0814E *jobname.identifier* **No LUCLASS parameter is specified.**

Explanation: The PARM field on the EXEC statement does not specify an LUCLASS parameter. This parameter is required.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Correct the PARM field on the EXEC statement, and restart the NetSpool program. For more information on the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0817E *jobname.identifier* **NetSpool is unable to load** *module***.**

Explanation: An error occurred while the NetSpool program was loading the specified module.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Ensure that the module is a member of a partitioned data set that was specified in the NetSpool startup procedure or that it is in the standard z/OS search order. Also, ensure that sufficient storage is available to load the module.

Operator Response: Notify the system programmer.

API0823E *jobname.identifier* *lu-name* **— An undetermined OPEN error occurred for LU, RC =** *rc***.**

Explanation: An attempt to open a VTAM LU failed for an unknown reason. The value returned in the ERROR field of the ACB is displayed in the *rc* portion of this message.

System Action: NetSpool does not attempt to reopen the ACB for the VTAM LU.

System Programmer Response: For error code 36 (24 hexadecimal), correct the specified APPL definition. For all other error codes, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: To determine the type of error that occurred, refer to the description of the OPEN macro, Completion Information section, in *z/OS Communications Server: SNA Programming*. Then contact the system programmer.

API0824E *jobname.identifier* *lu-name* **— VTAM does not recognize the LU.**

Explanation: The indicated LU name is not recognized by VTAM.

System Action: NetSpool periodically (every 60 seconds) attempts to open the VTAM LU.

System Programmer Response: Ensure the LUCLASS parameter on the EXEC statement specifies the correct set of classes. Also, ensure that the LUNAME in the Printer Inventory is correct and that an APPL statement exists for the LU name.

For information on the EXEC statement, refer to *z/OS Infoprint Server Customization*. For information on the Printer Inventory, refer to *z/OS Infoprint Server Operation and Administration*.

Operator Response: Ensure the specified LU is defined to VTAM and activated.

API0825E *jobname.identifier* *lu-name* **— LU is in the process of being opened or closed.**

Explanation: The specified VTAM LU is in the process of being opened or closed.

System Action: NetSpool periodically (every 60 seconds) attempts to open the LU.

System Programmer Response: No response is necessary.

Operator Response: Ensure the LU is not already being used by another application.

API0826E *jobname.identifier* *lu-name* **— LU is already in use by another application.**

Explanation: NetSpool cannot open the requested VTAM LU because the LU is already open, indicating it is being used by another instance of NetSpool.

System Action: NetSpool periodically (every 60 seconds) attempts to open the VTAM LU.

System Programmer Response: Ensure that the LUCLASS parameter on the EXEC statement is correct and that the LUCLASS parameter for the LU is correct in the Printer Inventory. Also, ensure the specified LU is not already being used by another application. For information about the EXEC statement, refer to *z/OS Infoprint Server Customization*. For information about the Printer Inventory, refer to *z/OS Infoprint Server Operation and Administration*.

Operator Response: To delete the LU from the list of LUs selected by this instance of NetSpool, type the LUNAME DEL command. This command will prevent NetSpool from periodically attempting to open the LU. Refer to *z/OS Infoprint Server Operation and Administration* for a description of the LUNAME DEL command.

API0827E *jobname.identifier* *lu-name* **— LU was improperly defined in VTAM definition decks.**

Explanation: A VTAM error occurred while the ACB for this LU was being opened. The error indicates that

the VTAM definition statement is not an APPL statement or that the APPL statement contains an inconsistent parameter. For more information, refer to the explanation of error codes 86 and 104 for the OPEN macro in *z/OS Communications Server: SNA Programming*.

System Action: NetSpool ignores the printer LU and does not made additional attempts to open the ACB for the printer LU.

System Programmer Response: Ensure that the LU name parameter in the Printer Inventory is correct and that an APPL statement exists for that LU name. Refer to *z/OS Infoprint Server Operation and Administration* for information about creating an APPL statement for an LU.

Operator Response: Notify the system programmer. Use the LUNAME ADD command to start the printer LU when the problem is corrected. Refer to *z/OS Infoprint Server Operation and Administration* for a description of the LUNAME ADD command.

API0828E *jobname.identifier*   *number* **LUs are not recognized by VTAM**

Explanation: The indicated number of LUs are not recognized by VTAM.

System Action: NetSpool periodically (every 60 seconds) attempts to open the LUs.

System Programmer Response: Ensure the LUCLASS parameter on the EXEC statement for NetSpool specifies the correct set of classes. Ensure the LU names are correct and that APPL statements exist for the LU names.

For information about the EXEC statement, refer to *z/OS Infoprint Server Customization*. For information about the Printer Inventory, refer to *z/OS Infoprint Server Operation and Administration*.

Operator Response: Ensure the LUs are defined to VTAM and activated.

API0829E *jobname.identifier*   *number* **LUs are in the process of being opened or closed.**

Explanation: The indicated number of LUs are in the process of opening or closing.

System Action: NetSpool periodically (every 60 seconds) attempts to open the LUs.

System Programmer Response: No response is necessary.

Operator Response: Ensure the LUs are not already being used by another application.

API0830E *jobname.identifier*   *number* **LUs are already in use by another application.**

Explanation: A connection request was received for the indicated number of LUs, which are already active.

System Action: NetSpool periodically (every 60 seconds) attempts to open the LUs.

System Programmer Response: Ensure the LUCLASS parameter on the EXEC statement specifies the correct classes. Also, ensure the LUs are not already in use by another application. For more information about the EXEC statement, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0831E *jobname.identifier*   *number* **LUs are improperly defined in VTAM definition deck.**

Explanation: NetSpool attempted to start the indicated number of LUs, but a VTAM error occurred when NetSpool attempted to open the ACBs. The VTAM error indicates that the VTAM definition statement is not an APPL statement or that the APPL statement contains an inconsistent parameter. For more information, refer to the explanation of error codes 86 and 104 for the OPEN macro in *z/OS Communications Server: SNA Programming*.

System Action: NetSpool ignores the LUs.

System Programmer Response: Ensure that the LU names in the Printer Inventory are correct and that valid APPL statements exist for these LU names. For information about creating APPL statements for printer LUs, refer *z/OS Infoprint Server Operation and Administration*.

Operator Response: After you correct the problem, use the LUNAME ADD command to start the LUs.

API0832E *jobname.identifier*   **SETLOGON failed for** *name*

Explanation: An attempt was made to issue a SETLOGON START command for an open ACB.

System Action: NetSpool closes the ACB and periodically (every 60 seconds) retries the OPEN ACB and SETLOGON commands.

System Programmer Response: Ensure enough storage is available for VTAM.

Operator Response: Notify the system programmer.

API0833E *jobname.identifier*   **VTAM is currently inactive.**

Explanation: The VTAM support on the system is not active.

System Action: NetSpool continues to run and periodically (every 60 seconds) retries the VTAM OPEN ACB command.

System Programmer Response: No response is necessary.

Operator Response: Ensure VTAM is active before starting NetSpool.

API0834E *jobname.identifier* **VTAM is shutting down**

Explanation: The VTAM support on the system is being shut down.

System Action: NetSpool continues to run and periodically (every 60 seconds) retries the VTAM OPEN ACB command.

System Programmer Response: No response is necessary.

Operator Response: Reactivate VTAM or stop the NetSpool program.

API0835E *jobname.identifier* **No VTAM exists on the system.**

Explanation: The system contains no VTAM support.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Ensure VTAM is installed before running NetSpool.

Operator Response: Notify the system programmer.

API0836E *jobname.identifier* **An error in allocating storage occurred when opening a VTAM LU.**

Explanation: NetSpool encountered a storage allocation error when opening a VTAM printer LU.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Increase the storage allocation for NetSpool on the startup procedure. For more information, refer to *z/OS Infoprint Server Customization*.

Operator Response: Notify the system programmer.

API0838E *jobname.identifier* **NetSpool command specified is not valid.**

Explanation: The MODIFY NetSpool operator command entered is not valid.

System Action: NetSpool waits for another command.

System Programmer Response: No response is necessary.

Operator Response: Type a valid NetSpool operator command.

API0842I *jobname.identifier* *lu-name* **ADD succeeded.**

Explanation: The LU using the *lu-name* was added to the list of selected printer LUs, and the VTAM ACB was successfully opened.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API0843I *jobname.identifier* *lu-name* **PURGE succeeded.**

Explanation: The printer LU named *lu-name* was purged from the list of printer LUs, and the VTAM ACB was successfully closed.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API0850I *jobname.identifier* **Command accepted**

Explanation: The operator entered a valid operator command, and NetSpool will perform the requested function.

System Action: NetSpool ends processing if the operator entered the QUIT or KILL command.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API0900E *jobname.identifier* **Load of module CEEPIPI failed. Abend code =** *code* **Abend reason code =** *reason code*

Explanation: The NetSpool LOAD of the module CEEPIPI failed.

System Action: NetSpool ends processing abnormally.

System Programmer Response: Look up the system abend code given in the message. Determine the reason that the LOAD failed and correct the problem. A STEPLIB to the SCEERUN library that contains CEEPIPI may need to be added to the NetSpool startup procedure. For information on the abend code, refer to *z/OS MVS System Codes*, SA22-7626.

Operator Response: No response is necessary.

API0901E *jobname.identifier* **CEEPIPI Init-Sub call failed. Return code =** *return code*

Explanation: The NetSpool call to CEEPIPI to preinitialize the Language Environment failed.

System Action: NetSpool ends processing abnormally.

System Programmer Response: Verify that modules APIIOPN, APIICNV, and APIICLS exist in SYS1.LINKLIB. For information on the return codes for CEEPIPI init_sub, refer to *z/OS Language Environment Programming Guide*, SA22-7561.

Operator Response: No response is necessary.

API0902E *jobname.identifier* **BPX1SDD set_dub_default failed. Return value =** *return value* **Return Code =** *return code* **Reason Code =** *reason code*

Explanation: The NetSpool call to set_dub_default (BPX1SDD) to set the dub default for the Language Environment failed.

System Action: NetSpool ends processing abnormally.

System Programmer Response: For information on the return value, return code, and reason code, refer to *z/OS UNIX System Services Messages and Codes*, SA22-7807. For information on set_dub_default refer to *z/OS UNIX System Services Programming: Assembler Callable Services Reference*.

Operator Response: No response is necessary.

API0903E *jobname.identifier* **ICONV open failed for luname =** *lu-name*. **Document codepage =** *codepage* **Printer codepage =** *codepage* **R15 =** *callrc*

Explanation: The NetSpool call to open an ICONV code conversion session failed. The data cannot be converted into PCL data and sent to the printer.

System Action: NetSpool returns negative response 081C0002 and terminates the job. NetSpool continues processing jobs for other printers.

System Programmer Response: Verify that the document code page and the printer code page in the message text are correct and valid ICONV code pages for this installation. For information on ICONV and valid code pages refer to *z/OS C/C++ Run-Time Library Reference*. More information on valid code sets is included in *z/OS C/C++ Programming Guide*.

For information on the R15 and CEEPIPI call_sub return codes, refer to *z/OS Language Environment Programming Guide*.

Message API904E is also issued and gives any LE environment error codes. There may also be relevant

error messages in the LE stdout file, usually SYSPRINT in the NetSpool startup procedure. Message API908E may appear.

Operator Response: No response is necessary.

System Programmer Response: If the code pages are not valid, specify valid code pages in the printer definition for the NetSpool printer LU *lu-name*.

API0904E *jobname.identifier* **CEEPIPI Language Environment error information: Return code =** *return code* **Reason code =** *reason code* **Feedback code =** *feedback code*

Explanation: The C Language Environment returned an error via CEEPIPI. This message is additional information for message API0903E, API0905E, or API0906E.

System Action: See message API0903E, API0905E, or API0906E.

System Programmer Response: For information on the return code and reason code, refer to *z/OS UNIX System Services Messages and Codes*. Sometimes the enclave return code is a C errno. There may also be relevant error messages in the LE stdout file, usually SYSPRINT in the NetSpool startup procedure, which will decode the error. Message API0908E may appear. For information on the feedback code refer to *z/OS Language Environment Debugging Guide* and *z/OS Language Environment Run-Time Messages*.

Operator Response: No response is necessary.

API0905E *jobname.identifier* **ICONV text conversion failed for luname =** *printerlu*. **Document codepage =** *document cp* **Printer codepage =** *printer cp* **R15 =** *callrc*

Explanation: The NetSpool call to convert data using ICONV failed. Data cannot be converted into PCL data.

System Action: NetSpool returns negative response 081C0002 and terminates the job. NetSpool continues processing jobs for other printers.

System Programmer Response: Verify that the document and printer code pages in the message are correct and that they are valid ICONV code pages for this installation.

For information on the R15 and CEEPIPI call_sub return codes, refer to *z/OS Language Environment Programming Guide*. Message API0904E is also issued and gives any LE environment error codes. There might also be relevant error messages in the LE stdout file, usually SYSPRINT in the NetSpool startup procedure, which will decode the error. Message API0908E may appear there. For information on ICONV and valid code pages refer to *z/OS C/C++ Run-Time Library Reference*. More information on valid code sets is included in *z/OS C/C++ Programming Guide*. Message

API0907E might also be issued to give the code point that failed.

Operator Response: No response is necessary.

API0906E *jobname.identifier* **ICONV close failed for luname =** *printerlu*. **R15 =** *callrc*

Explanation: The NetSpool call to close the ICONV code conversion session failed. The data cannot be converted into PCL data and sent to the printer.

System Action: NetSpool continues processing jobs for other printers.

System Programmer Response: For information on the R15 and CEEPIPI call_sub return codes, refer to *z/OS Language Environment Programming Guide*. Message API0904E is also issued and gives any LE environment error codes. There may also be relevant error messages in the LE stdout file, usually SYSPRINT in the NetSpool startup procedure, which will decode the error. Message API908E may appear.

Operator Response: No response is necessary.

API0907E *jobname.identifier* **ICONV text conversion failed for luname =** *printerlu*. **In_bytesleft =** *in_bytesleft* **Out_bytesleft = *out_bytesleft* **Next_unconverted_char = *char*

Explanation: This message is additional information for message API0905E.

The code point that could not be converted is next_unconverted_char in this message. The next location in the input buffer and output buffer is also given.

System Action: See message API0905E.

System Programmer Response: See message API0905E.

Operator Response: No response is necessary.

API0908E *jobname.identifier* **Errno =** *errno strerror*

Explanation: This message is additional information for message API0903E, API0905E, or API0906E.

The message is issued in the C Language Environment and gives the errno for the error encountered. The strerror is the meaning given for the errno.

System Action: See message API0903E, API0905E, or API0906E.

System Programmer Response: See message API0903E, API0905E, or API0906E.

Operator Response: No response is necessary.

API0950E *jobname.identifier* **SCS data stream contains a character that is not valid.**

Explanation: NetSpool detected either an unsupported SCS command or data that was not valid in an SCS string. Message API0954I provides additional information about the error.

If the character that is not valid is X'19', your input data stream is probably a 3270 data stream, rather than an SCS data stream.

System Action: NetSpool returns a negative response. If the error was an unsupported SCS command, the sense code returned a response of X'10030000'. If the error was caused by data that was not valid in a DBCS string in the SCS data, the sense code returned a response of X'10010000'.

User Response: Refer to the NetSpool SCS appendix in *z/OS Infoprint Server User's Guide* and the information from message API0954I to determine the error and correct the input data.

To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace. Then view or print the trace using event identifier FAC.

System Programmer Response: If the character that is not valid is X'19', change the NetSpool LU type from LU type 1 to LU type 0 or 3 in the VTAM major node definitions and in the application's resource definitions.

Obtain a NetSpool external trace to help find an error in the input data stream. See "Starting a NetSpool Trace" on page 200 for information.

Operator Response: No response is necessary.

API0951E *jobname.identifier* **SCS control code parameter is missing or not valid.**

Explanation: NetSpool detected either an unsupported or a missing parameter for an SCS control code. Message API0954I provides additional information about the error.

System Action: NetSpool returns a negative response with a sense code of X'10050000'.

User Response: Refer to the NetSpool SCS appendix in *z/OS Infoprint Server User's Guide* and the information from message API0954I to determine the error and correct the input data. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace. Then view or print the trace using event identifier FAC.

System Programmer Response: Obtain a NetSpool external trace to help find an error in the input data stream. See "Starting a NetSpool Trace" on page 200 for information.

Operator Response: No response is necessary.

API0952E *jobname.identifier* **3270 data stream command or order is not valid.**

Explanation: NetSpool detected an unsupported or incorrect command or order in the 3270 data stream. Message API0954I provides additional information about the error.

System Action: NetSpool returns a negative response with a sense code of X'10030000'.

User Response: Refer to the NetSpool 3270 appendix in *z/OS Infoprint Server User's Guide* and the information from message API0954I to determine the error and correct the input data. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace. Then view or print the trace using event identifier FAC.

System Programmer Response: Obtain a NetSpool external trace to help find an error in the input data stream. See "Starting a NetSpool Trace" on page 200 for information.

Operator Response: No response is necessary.

API0953E *jobname.identifier* **3270 data stream parameter is not valid.**

Explanation: NetSpool detected an unsupported or incorrect parameter for an order in the 3270 data stream. Message API0954I provides additional information about the error.

System Action: NetSpool returns a negative response with a sense code of X'10050000'.

User Response: Refer to the NetSpool 3270 appendix in *z/OS Infoprint Server User's Guide* and information from message API0954I to determine the error and correct the input data. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace. Then view or print the trace using event identifier FAC.

System Programmer Response: Obtain a NetSpool external trace to help find an error in the input data stream. See "Starting a NetSpool Trace" on page 200 for information.

Operator Response: No response is necessary.

API0954I *jobname.identifier* **Code point:** *hex-value* **Offset:** *nnnn* **LU:** *lu-name*

Explanation: Additional information is provided about the error in the data stream. The code point is the hex value of the data in error. Offset is the offset in the RU. LU is the printer LU name. A previous message indicates the error.

If the code point that is not valid is X'19', your input data stream is probably a 3270 data stream, rather than an SCS data stream.

System Action: See a previous error message for the action taken by NetSpool.

User Response: Correct the error indicated in a previous error message. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace. Then view or print the trace using event identifier FAC.

System Programmer Response: If the code point that is not valid is X'19', change the NetSpool LU type from LU type 1 to LU type 0 or 3 in the VTAM major node definitions and the application's resource definitions.

Obtain a NetSpool external trace to help find an error in the input data stream. See "Starting a NetSpool Trace" on page 200 for information.

Operator Response: No response is necessary.

API0955E *jobname.identifier* **Transparent data is incomplete at end of data set. LU:** *lu-name*

Explanation: The end of file was reached before the end of the transparent data in the data stream. The transparent data length may be incorrect or the End-of-File rule for this LU may be ending the data set prematurely.

System Action: NetSpool returns a negative response with a sense code of X'10050000'.

User Response: Correct the input data if the transparent data length is incorrect. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace. Then view or print the trace using event identifier FAC.

System Programmer Response: Obtain a NetSpool external trace to help find an error in the input data stream. See "Starting a NetSpool Trace" on page 200 for information.

Operator Response: No response is necessary.

API0956E *jobname.identifier* **NetSpool attempted to print a line above the top margin. PLU:** *plu-name* **SLU:** *slu-name*

Explanation: NetSpool attempted to print a line in an area that is above the line number specified as the top margin.

In the message text, *plu-name* is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. *slu-name* is the VTAM secondary LU name, which identifies the NetSpool printer LU; the SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact the IBM Software Support Center.

Operator Response: Notify the system programmer.

API0957E *jobname.identifier* **NetSpool attempted to print characters before the left margin column. PLU:** *plu-name* **SLU:** *slu-name*

Explanation: NetSpool attempted to print characters in an area that is to the left of the column number specified as the left margin.

In the message text, *plu-name* is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. *slu-name* is the VTAM secondary LU name, which identifies the NetSpool printer LU; the SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact the IBM Software Support Center.

Operator Response: Notify the system programmer.

API0958E *jobname.identifier* **An error occurred while processing page format parameters.**

Explanation: An error occurred while NetSpool was processing page format parameters either from the printer inventory or SCS command. The message is followed by additional messages that explain the problem: API0959E, API0960E, and API0961E.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact the IBM Software Support Center.

Operator Response: Notify the system programmer.

API0959E *jobname.identifier* **Set Horizontal Format or Set Vertical Format are not specified in the parameters. PLU:** *plu-name* **SLU:** *slu-name*

Explanation: The page format parameters do not specify horizontal or vertical format.

In the message text, *plu-name* is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. *slu-name* is the VTAM secondary LU name, which identifies the NetSpool printer LU; the SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact the IBM Software Support Center.

Operator Response: Notify the system programmer.

API0960E *jobname.identifier* **Set Horizontal Format parameter is not valid: Parameter type:***type* **PLU:** *plu-name* **SLU:** *slu-name*

Explanation: The parameter type (CNT, LM, RM, or HT) specifies the parameter in error.

In the message text, *plu-name* is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. *slu-name* is the VTAM secondary LU name, which identifies the NetSpool printer LU; the SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact the IBM Software Support Center.

Operator Response: Notify the system programmer.

API0961E *jobname.identifier* **Set Vertical Format parameter is not valid: Parameter type:** *type* **PLU:** *plu-name* **SLU:** *slu-name*

Explanation: The parameter type (CNT, LM, RM, or HT) specifies the parameter in error.

In the message text, *plu-name* is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. *slu-name* is the VTAM secondary LU name, which identifies the NetSpool printer LU; the SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact the IBM Software Support Center.

Operator Response: Notify the system programmer.

API1001I *jobname.identifier* *lu-name* **— LU is NOT SELECTED.**

Explanation: The indicated VTAM LU is not selected for processing by this instance of NetSpool. Verify that the printer logical unit using this LU name is in an LU class that was started. The LUNAME ADD command can be used to add this LU to the list of selected LUs.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1002I *jobname.identifier* *lu-name* **— LU IS STARTED.**

Explanation: The indicated VTAM LU name is started by this instance of NetSpool. The LU is either in a VTAM session or is ready to accept a request to establish a VTAM session.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1003I *jobname.identifier* *lu-name* **— LU IS WAITING.**

Explanation: The indicated VTAM LU could not be started because either the LU is not active in VTAM or because it is started by another instance of NetSpool. NetSpool periodically (every 60 seconds) attempts to start the LU.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: To start the LU, activate it in VTAM. To stop the LU, enter the LUNAME DEL command. If the LU is started by another instance of NetSpool, stop it in the other instance of NetSpool and then activate it in VTAM again. For information about the operator commands used to start and stop LUs, refer to *z/OS Infoprint Server Operation and Administration*.

API1004I *jobname.identifier* **Display of LUs in the STARTED state.**

Explanation: The operator requested the display of all VTAM LUs started by this instance of NetSpool. Subsequent messages display the LUs that are either in a session with a VTAM application or are ready to accept a request from a VTAM application to establish a session. LUs are displayed in the order in which they were activated.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1005I *jobname.identifier* **Display of LUs in the WAITING state.**

Explanation: The operator requested the display of all LUs that are in the WAITING state. Subsequent messages display the LUs that have been selected but could not be started because either they are not active in VTAM or because they are started by another

instance of NetSpool. LUs are displayed in the order in which they were activated.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1006I *jobname.identifier* *lu-name* **- LU is STOPPED.**

Explanation: The indicated VTAM printer LU is STOPPED because the LUNAME DEL command has previously been issued. This printer LU will not be used by this instance of NetSpool until an LUNAME ADD command is issued.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: To start the printer LU, activate it in VTAM. To stop the printer LU, enter the LUNAME DEL command. If the printer LU is started by another instance of NetSpool, stop it in the other instance of NetSpool and then activate it in VTAM again. For more information about the operator commands used to start and stop printer LUs, refer to *z/OS Infoprint Server Operation and Administration*.

API1007I *jobname.identifier* **Display of LUs in the STOPPED state**

Explanation: The operator requested the display of all printer LUs that are in the STOPPED state. Subsequent messages display the printer LUs that have been stopped by use of the LUNAME DEL command. These printer LUs will not be started by this instance of NetSpool until an LUNAME ADD command is issued.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1008I *jobname.identifier* **Display of SELECTED LUs**

Explanation: The operator requested the display of all LUs that are selected by this instance of NetSpool. Subsequent messages display the status of the LUs. The status can be either STARTED or WAITING. Refer to *z/OS Infoprint Server Operation and Administration* for an explanation of the two states. LUs are displayed in the order in which they were activated.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1009E *jobname.identifier* **NetSpool is not running APF authorized.**

Explanation: NetSpool must be running authorized to execute properly. NetSpool will terminate. The load library for NetSpool must be an APF-authorized library.

System Action: NetSpool terminates.

System Programmer Response: Place the NetSpool load libraries in an APF-authorized library. Also ensure that all libraries in the JOBLIB or STEPLIB are APF-authorized. Restart NetSpool.

Operator Response: No response is necessary.

API1010E *jobname.identifier* **NetSpool was not able to connect to the Printer Inventory. Inventory return code =** *retcode***, Inventory reason code =** *reason code*

Explanation: NetSpool must be able to connect to the Printer Inventory specified in the **INV=***xxxx* startup parameter. The return code and reason code issued by the Printer Inventory Manager indicate the reason for the failure. See Chapter 5, "Printer Inventory Manager Return Codes and Reason Codes" on page 157 for explanations of Printer Inventory Manager return and reason codes.

System Action: NetSpool terminates.

System Programmer Response: Correct the Printer Inventory Manager error. Restart NetSpool.

Operator Response: No response is necessary.

API1011E *jobname.identifier* **NetSpool was not able to read printer** *printer-name* **from the Printer Inventory. Inventory return code =** *retcode* **Inventory reason code =** *reason code*

Explanation: NetSpool was not able to read from the Printer Inventory specified in the **INV=***xxxx* startup parameter. The return code and reason code issued by the Printer Inventory Manager indicate the reason for the failure. See Chapter 5, "Printer Inventory Manager Return Codes and Reason Codes" on page 157 for explanations of Printer Inventory Manager return and reason codes.

System Action: NetSpool terminates.

System Programmer Response: Correct the Printer Inventory Manager error. Restart NetSpool.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: No response is necessary.

API1012E *jobname.identifier* **INV startup parameter was not specified.**

Explanation: NetSpool initialization parameter INV was not specified in the PARM field in the EXEC statement in the NetSpool startup procedure.

System Action: NetSpool terminates.

System Programmer Response: Add the INV parameter to the PARM field in the EXEC statement in the NetSpool startup procedure and restart NetSpool. For more information about the NetSpool startup procedure, refer to *z/OS Infoprint Server Customization*.

Operator Response: No response is necessary.

API1013E *jobname.identifier* **Unable to access Printer Inventory during NetSpool initialization. NetSpool will terminate.**

Explanation: An error occurred while attempting to read from the Printer Inventory during NetSpool initialization.

System Action: NetSpool terminates

System Programmer Response: Examine previous NetSpool messages to determine the exact problem with accessing the Printer Inventory.

Operator Response: No response is necessary.

API1014E *jobname.identifier* **NetSpool will continue processing with previously cached printer definitions.**

Explanation: An error occurred while attempting to read from the Printer Inventory. NetSpool will attempt to continue processing with previously cached printer definitions. If processing requires new printer definitions, you may experience processing errors.

System Action: NetSpool continues processing.

System Programmer Response: Examine previous NetSpool messages to determine the exact problem with accessing the Printer Inventory.

Operator Response: No response is necessary.

API1015I *jobname.identifier* **NetSpool access to the inventory has been reestablished.**

Explanation: NetSpool access to the Printer Inventory has been reestablished. NetSpool will now be able to access the current printer definitions again.

System Action: NetSpool continues processing.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1016E *jobname.identifier* **NetSpool was not able to open a query to the Printer Inventory. Inventory return code =** *retcode* **Inventory reason code =** *reason code*

Explanation: NetSpool was not able to open a cursor from the Printer Inventory specified in the **INV=***xxxx* startup parameter. The return code and reason code issued by the Printer Inventory Manager indicate the reason for the failure. See Chapter 5, "Printer Inventory Manager Return Codes and Reason Codes" on page 157 for explanations of Printer Inventory Manager return and reason codes.

System Action: NetSpool terminates if this occurs during initialization. NetSpool will continue processing with the currently cached information from the Printer Inventory if NetSpool has completed initialization processing.

System Programmer Response: Correct the Printer Inventory Manager error. Restart NetSpool.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

API1017E *jobname.identifier* **NetSpool was not able to read printer name** *printer-name* **from the Printer Inventory. Inventory return code =** *retcode* **Inventory reason code =** *reason code*

Explanation: NetSpool was not able to read from the Printer Inventory specified in the **INV=***xxxx* startup parameter. The return code and reason code issued by the Printer Inventory Manager indicate the reason for the failure. See Chapter 5, "Printer Inventory Manager Return Codes and Reason Codes" on page 157 for explanations of Printer Inventory Manager return and reason codes.

System Action: NetSpool will continue to process with previously cached information from the Printer Inventory.

System Programmer Response: Correct the Printer Inventory Manager error. Restart NetSpool.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: No response is necessary.

API1021I *jobname.identifier* **NetSpool initialization is complete.**

Explanation: NetSpool initialization is complete. NetSpool is now ready to accept commands and input data streams.

System Action: Processing continues

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1030E *jobname.identifier* **LUNAME** *lu-name* **is still in use. ADD of LUNAME was rejected.**

Explanation: The indicated printer LU is already in use by this instance of NetSpool. The printer LU may have been assigned to another printer at one time. To force the LU to be freed from its previous session, issue the LUNAME PURGE command.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1031E *jobname.identifier* **LUNAME** *lu-name* **was not found in the Printer Inventory. ADD of LUNAME was rejected.**

Explanation: The indicated LU name was not found in the Printer Inventory in use by this instance of NetSpool.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1032E *jobname.identifier* **LUNAME** *lu-name* **was not found. DEL of LUNAME was rejected.**

Explanation: The indicated LU name was not found.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1033I *jobname.identifier* **LUNAME** *lu-name* **DEL was successful.**

Explanation: The indicated LU name was deleted from this instance of NetSpool.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1034I *jobname.identifier* **LUNAME** *lu-name* **is still active. The LU is now PENDING CLOSE.**

Explanation: The indicated LU name currently has an active session. It will be closed and deleted when the session terminates. The LUNAME PURGE command can be used to force NetSpool to terminate the session immediately.

The VTAM VARY INACT command can also be used to deactivate the session. When the LU is inactive, issue the LUNAME DEL command again.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1035I **ADD of LUNAME** *lu-name* **was rejected.**

Explanation: A previous processing error caused the LUNAME ADD command to fail.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1036I *jobname.identifier* **LUNAME** *lu-name* **is not a SELECTED luname. PURGE of LUNAME was rejected.**

Explanation: The indicated LU name was not found in the list of active LUs for this instance of NetSpool.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1050I *jobname.identifier* *lu-name*—**LU is PENDING CLOSE.**

Explanation: The indicated VTAM LU is pending close. It will be closed when the current session is complete.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1051I *jobname.identifier* **No LUs are currently SELECTED.**

Explanation: No VTAM LUs are currently selected for processing by this instance of NetSpool. NetSpool automatically selects LUs that were defined in started

LU classes. LU classes are started via the LUCLASS parameter on the NetSpool JCL PROC.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1052I *jobname.identifier* **No LUs are currently WAITING.**

Explanation: No VTAM LUs are currently waiting to be started. All selected LUs are already started.

System Action: Processing continues

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1053I *jobname.identifier* **No LUs are currently STARTED.**

Explanation: No VTAM LUs are currently started by this instance of NetSpool. The DISPLAY WAITING command can be used to determine if NetSpool is currently attempting to start any LUs.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1054I *jobname.identifier* **No LUs are currently STOPPED.**

Explanation: No VTAM LUs currently are in a state of STOPPED by this instance of NetSpool. The DISPLAY WAITING command can be used to determine if NetSpool currently is attempting to start any VTAM LUs.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1060I *jobname.identifier* **Tracing is not active.**

Explanation: Tracing is not currently active for NetSpool. Use the TRACE ON command to activate internal or external tracing.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1061I *jobname.identifier* **Full tracing is active for program control.**

Explanation: Internal and external tracing of NetSpool program control is active.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1062I *jobname.identifier* **Internal tracing is active for program control.**

Explanation: Only internal tracing of NetSpool program control is active.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1063I *jobname.identifier* **Full tracing is active for all LUs.**

Explanation: External and internal tracing of all LUs being processed by NetSpool is active.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1064I *jobname.identifier* **Internal tracing is active for all LUs.**

Explanation: Only internal tracing of all LUs being processed by NetSpool is active.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1065I   **Full tracing is active for LU** *lu-name*.

Explanation: External and internal tracing is active for the listed LU name.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API1066I *jobname.identifier* **Internal tracing is active for LU** *lu-name*.

Explanation: Only internal tracing is active for the listed LU name.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API2001E *jobname.identifier* **FAILED TO LOAD MESSAGE TABLE** *name*.

Explanation: Messaging could not load the message table into storage. Either the table was not found in the STEPLIB/LINKLIST concatenation or the available virtual storage was not sufficient to load the table.

System Action: Messaging is not available. The task is terminated.

System Programmer Response: Ensure that the correct three-character language code is in the startup JCL and that the message table is in a library in the load module library search list (STEPLIB/LINKLIST). The message table is named APIMT*xxx*, where *xxx* is the language code.

Operator Response: Select the correct language when starting the program.

API2002E *jobname.identifier* **UNABLE TO CREATE MESSAGE TABLE TOKEN** *name*.

Explanation: Messaging could not create the named token that contains the message table anchor.

System Action: Messaging is not available. The task is terminated.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API2003I *jobname.identifier* **UNABLE TO RETRIEVE MESSAGE TABLE** *name*.

Explanation: Messaging could not retrieve the named token that contains the message table anchor.

System Action: NetSpool terminates.

System Programmer Response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API2004E *jobname.identifier* **UNABLE TO DELETE MESSAGE TABLE FROM STORAGE** *name*

Explanation: Messaging could not delete the message table from storage during termination.

System Action: Termination continues.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API2005E *jobname.identifier* **UNABLE TO DELETE MESSAGE TABLE TOKEN** *name*

Explanation: Messaging could not delete the named token that contains the message table anchor.

System Programmer Response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API2006E *jobname.identifier* **NETSPOOL INTERNAL ERROR TOKEN** *function code*.

Explanation: An unknown function code was sent to messaging initialization routine. This is an internal error.

System Action: The task is terminated.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API2007E *jobname.identifier* **UNABLE TO RETRIEVE MESSAGE TABLE TOKEN** *name*

Explanation: Messaging could not retrieve the named token that contains the message table anchor.

System Action: Messaging terminated.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API2008E *jobname.identifier* **UNABLE TO OBTAIN** *nnnn* **BYTES OF STORAGE FOR MESSAGE DCB.**

Explanation: Messaging could not obtain storage below 16 megabytes for the message file DCB.

System Action: Messaging terminated.

System Programmer Response: If the error condition

persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Rerun in a larger region.

API2009E *jobname.identifier* **FAILED TO LOAD MESSAGE I/O MODULE** *name*.

Explanation: Messaging could not load the message I/O program into storage. Either the module was not found in the STEPLIB/LINKLIST or the available virtual storage was not sufficient to load the module.

System Action: Messaging is not available. The task is terminated.

System Programmer Response: Ensure that APIMSGIO, the message I/O module, is in a library in the load module library search list (STEPLIB/LINKLIST).

Operator Response: Notify the system programmer.

API2010I *jobname.identifier* **UNABLE TO DELETE MESSAGE I/O MODULE FROM STORAGE** *name*

Explanation: Messaging could not delete the message I/O module from storage during termination.

System Action: The termination task continues.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API4001E *jobname.identifier* **The trace options data set could not be opened.**

Explanation: NetSpool could not open the trace options data set. Ensure that the name of the DD statement is correct and refers to the correct data set.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Correct the error, and restart the NetSpool program.

Operator Response: Notify the system programmer.

API4002E *jobname.identifier* **No data was found in trace options data set.**

Explanation: No trace options were found in the trace options data set. Ensure that the correct data set is specified on the TRACEOPT DD statement in the NetSpool startup procedure.

System Action: NetSpool processing ends abnormally.

System Programmer Response: Create a valid data set and specify it in the TRACEOPT DD statement in

the NetSpool startup procedure. Then, restart the NetSpool program.

Operator Response: Notify the system programmer.

API4005E *jobname.identifier* **A keyword is not valid.**

Explanation: A keyword in the trace options data set is not valid. For more information, see Chapter 9, "Using NetSpool Diagnostic Tools" on page 199.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4006E *jobname.identifier* **No value follows the keyword**

Explanation: A keyword in the trace options data set does not contain a value after the equal sign. For more information, see Chapter 9, "Using NetSpool Diagnostic Tools" on page 199.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4007E *jobname.identifier* **A list of values ended prematurely.**

Explanation: No matching right parentheses was found for the list of values in the trace options data set. For information about how to code a list of values, see Chapter 9, "Using NetSpool Diagnostic Tools" on page 199.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Add a matching right parenthesis.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4009E *jobname.identifier* **Dynamic Allocation failed for SYSOUT data set for printer name:** *printer-name***.**

Explanation: NetSpool was unsuccessful in attempting to dynamically allocate an output data set. Subsequent system message indicates specific error information.

System Action: NetSpool stops processing the data set.

System Programmer Response: Ensure that allocation parameters for the indicated printer definition are correct in the Printer Inventory.

Operator Response: Notify the system programmer.

API4010E *jobname.identifier* **NetSpool could not open the SYSOUT data set for PLU:** *plu-name***, SLU:** *slu-name***.**

Explanation: NetSpool could not successfully issue an OPEN macro for an output data set for the indicated primary and secondary LUs.

| In the message text, *plu-name* is the VTAM primary
| logical unit name, which identifies the VTAM application
| that submitted the print request. *slu-name* is the VTAM
| secondary LU name, which identifies the NetSpool
| printer LU; the SLU name is the NetSpool LU name
| specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API4013E *jobname.identifier* **The numeric value is not valid.**

Explanation: A parameter in the trace options data set contains a value that is not numeric or is out of the valid range. Message API4901I indicates where the error occurred. See Chapter 9, "Using NetSpool Diagnostic Tools" on page 199 for more information.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4014E *jobname.identifier* **The value contains a character that is not valid.**

Explanation: The value for a parameter in the trace options data set contains an invalid character. Message API4901I indicates where the error occurred. See Chapter 9, "Using NetSpool Diagnostic Tools" on page 199 for more information.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4017E *jobname.identifier* **The value is too long**

Explanation: A value for a keyword in the trace options data set exceeds the maximum number of characters allowed. Message API4901I indicates where the error occurred. For more information, see Chapter 9, "Using NetSpool Diagnostic Tools" on page 199.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4018E *jobname.identifier* **Too many values are specified for this keyword**

Explanation: A keyword in the trace options data set contains too many values. Message API4901I indicates where the error occurred. For more information, see Chapter 9, "Using NetSpool Diagnostic Tools" on page 199.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API4020E *jobname.identifier* **Dynamic output failed for SYSOUT data set. Error in printer definition:** *printer-name* **Return code:** *retcode* **Reason Code:** *reasoncode* **OUTADD descriptor key:** *hex-value*

Explanation: NetSpool was unsuccessful in attempting to create an output descriptor for an output data set. Refer to the z/OS MVS Authorized Assembler Services references for explanation of the return and reason codes. Refer to *z/OS MVS Programming: Authorized Assembler Services Guide* for explanation of the descriptor key error.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Correct the allocation parameter in error in the Printer Inventory.

Operator Response: Notify the system programmer.

API4021E *jobname.identifier* **NetSpool could not find a printer definition for member name:** *printer-name*.

Explanation: The printer definition for the indicated printer pool member name was not found in the Printer Inventory in use by this instance of NetSpool.

System Action: NetSpool stops processing the data set.

System Programmer Response: Ensure that the printer pool member name is correct and is included in the Printer Inventory.

Operator Response: Notify the system programmer.

API4022E *jobname.identifier* **An error occurred when deleting an output descriptor. Printer definition in error:** *printer-name* **Return code:** *retcode* **Reason Code:** *reasoncode*

Explanation: NetSpool was unsuccessful in attempting to delete an output descriptor for a printer definition. Refer to the z/OS MVS Authorized Assembler Services references for explanation of the return and reason codes. Refer to *z/OS MVS Programming: Authorized Assembler Services Guide* for explanation of the descriptor key error.

System Action: NetSpool stops processing for this printer definition.

System Programmer Response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API4102E *jobname.identifier* **GETMAIN failed for trace blocks.**

Explanation: Not enough storage is available for NetSpool to provide tracing.

System Action: NetSpool processing continues without tracing.

System Programmer Response: Increase the size on the REGION parameter of the EXEC statement in the NetSpool startup procedure.

Operator Response: Notify the system programmer.

API4203E *jobname.identifier* **NetSpool could not close the SYSOUT data set for PLU:** *plu-name* **SLU:** *slu-name*.

Explanation: NetSpool was unsuccessful in issuing a CLOSE macro for the output data set.

In the message text, *plu-name* is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. *slu-name* is the VTAM secondary LU name, which identifies the NetSpool printer LU; the SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System Action: NetSpool stops processing for this data set.

System Programmer Response: Contact your service representative in the IBM Support Center, or use

your electronic link with IBM service for assistance.

Operator Response: Notify the system programmer.

API4901I *jobname.identifier* **Record:** *nnnn*, **OFFSET:** *nn* **contains the error.**

Explanation: NetSpool detected an error in the indicated trace options data set at the indicated offset. A previous message describes the error.

System Action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

System Programmer Response: Correct the data set.

Operator Response: After the system programmer corrects the data set, restart NetSpool.

API5000E *jobname.identifier* **NetSpool found a trace options error.**

Explanation: NetSpool has detected an error in the trace options data set or in the TRACE operator command. Subsequent messages provide more specific information about the error.

System Action: If this error occurs on the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is started, but other trace options may not take effect.

System Programmer Response: If the error is in the trace options data set, correct the error indicated in the subsequent error message and start NetSpool again.

Operator Response: If the error is in the TRACE command entered from the operator console, correct the error indicated in the subsequent error message. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5001E *jobname.identifier* **A name following the LUNAME keyword is too long.**

Explanation: NetSpool has detected an error in the trace options data set or in the TRACE operator command. An LU name specified with the LUNAME keyword is too long.

System Action: If this error occurs on the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is started, but other trace options may not take effect.

System Programmer Response: If the error is in the trace options data set, correct the error and start NetSpool again.

Operator Response: If the error is in the TRACE

command entered from the operator console, correct the error. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5002E *jobname.identifier* **A parameter specified after the TYPE keyword is not valid.**

Explanation: NetSpool has detected an error in the trace options data set or in the TRACE operator command. INTERNAL or FULL was not specified after the TYPE keyword.

System Action: If this error occurs on the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is started, but other trace options may not take effect.

System Programmer Response: If the error is in the trace options data set, correct the error and start NetSpool again.

Operator Response: If the error is in the TRACE command entered from the operator console, correct the error. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5003I *jobname.identifier* **NetSpool tracing is active.**

Explanation: NetSpool internal tracing is active for the program control and the LUs specified in the trace options.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5004I *jobname.identifier* **External tracing to GTF has started.**

Explanation: NetSpool has started tracing externally to GTF for the program control and for the LUs specified in the trace options.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5005I *jobname.identifier* **Issue the DISPLAY TRACE command to verify NetSpool tracing.**

Explanation: NetSpool has prompted the operator to issue a DISPLAY TRACE command to verify the trace status of the NetSpool program control and the LUs.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5006I *jobname.identifier*   **External tracing to GTF has stopped.**

Explanation: NetSpool has stopped tracing externally to GTF for the program control and the LUs, as specified in the trace options with the TRACE OFF operator command.

System Action: Processing continues.

System Programmer Response: No response is necessary.

Operator Response: Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5007I *jobname.identifier*   **GTF return code =** *retcode*

Explanation: GTF has returned a non-zero return code while NetSpool was tracing externally. The return codes are as follows:

4	inactive MVS GTF
8	invalid length
10	invalid FID
14	invalid EID
18	no GTF buffer space
1C	incorrect parameter address
20	data paged out
xx	unknown GTF return code

System Action: NetSpool processing continues. The action depends on the return code. For return codes 18 and 20, tracing continues to GTF. For all other return codes, NetSpool GTF tracing stops.

System Programmer Response: Refer to *z/OS MVS Diagnosis: Tools and Service Aids* for more information about the return codes.

Operator Response: Notify the system programmer.

API5008E *jobname.identifier*   *trace-name* **– Virtual storage could not be acquired for tracing. Tracing has been cancelled.**

Explanation: NetSpool is unable to obtain storage for the internal wrap trace.

System Action: NetSpool processing continues. Internal tracing is cancelled for the NetSpool program control or the requested LU.

System Programmer Response: Reduce the size of the internal trace storage using the PAGECOUNT trace options parameter or trace fewer LUs. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

Operator Response: If the error occurred when using the trace options data set, notify the system programmer. If the error occurred when the NetSpool TRACE command was issued, reduce the size of the internal trace storage using the PAGECOUNT trace options parameter, or trace fewer LUs. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5009E *jobname.identifier*   **Trace command is not valid.**

Explanation: ON or OFF was not specified with the TRACE operator command.

System Action: NetSpool processing continues. Tracing is not started or stopped.

System Programmer Response: No response is necessary.

Operator Response: Enter the TRACE command with ON or OFF followed by a comma, if other options are specified. If no other options are specified, do not enter any other data on the command line.

API5010E *jobname.identifier*   *lu-name* **specified in trace options is not being processed by NetSpool.**

Explanation: The LU name specified after the LUNAME keyword in the trace options data set or in the TRACE operator command is not SELECTED by this instance of NetSpool. The LU is either not defined in the Printer Inventory or it is not in a ″STARTED″ or ″WAITING″ state. For more information on the status of the LUs, refer to *z/OS Infoprint Server Operation and Administration*.

System Action: If this error occurs in the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is active, but other trace options may not take effect.

System Programmer Response: If the error is in the trace options data set, correct the error and start NetSpool again.

Operator Response: If the error is in the TRACE command entered from the operator console, correct the error. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

API5011I *jobname.identifier* **All NetSpool tracing has stopped.**

Explanation: NetSpool has stopped tracing because a TRACE OFF command requested that all tracing be stopped.

System Action: Processing continues. NetSpool external tracing has stopped for the program control and all LUs.

System Programmer Response: Enter the DISPLAY TRACE NetSpool command to verify the trace status.

Operator Response: Enter the DISPLAY ALL NetSpool command to verify the trace status.

API5012I *jobname.identifier* **NetSpool tracing for all LUs has stopped.**

Explanation: NetSpool has stopped tracing because a TRACE OFF command requested that tracing for all LUs be stopped.

System Action: Processing continues. NetSpool internal and external tracing has stopped for all LUs.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

API5013I *jobname.identifier* **NetSpool tracing for selected LUs has stopped.**

Explanation: NetSpool has stopped tracing because a TRACE OFF command requested that tracing for selected LUs be stopped.

System Action: Processing continues. NetSpool external and internal tracing has stopped for selected LUs.

System Programmer Response: No response is necessary.

Operator Response: No response is necessary.

System Abend Code and Reason Codes

The system abend code for abends issued by NetSpool is **8C3**.

NetSpool does not attempt to restart after an abend. NetSpool issues a reason code for each abend. Reason codes are listed in Table 3 on page 154.

In the event of an abend, you should capture the dump, save the abend information from the operator console, and report the error to the IBM Support Center.

Table 3. NetSpool Abend Reason Codes

Abend Reason Code	Meaning
X'0500'	Unable to get storage
X'0501'	Problem with Printer Inventory
X'0502'	Attach of subtask failed
X'0503'	Latch service failed
X'0504'	VTAM problem
X'0505'	Select logic error
X'0506'	Modeset failed
X'0507'	Initial building of printer definition block failed
X'0508'	Initial building of LU block failed
X'0509'	Incorrect function code in event block
X'0510'	Incorrect display function code
X'0511'	Incorrect LU type in session block
X'0512'	Incorrect PLU type in EOF rules
X'0513'	Incorrect object type in event block
X'0514'	Incorrect object type specified in parameter list when building printer definition block
X'0515'	Unable to find printer definition block to be deleted

Table 3. NetSpool Abend Reason Codes (continued)

Abend Reason Code	Meaning
X'0516'	SCS page format is not valid. It does not start with 2BC1 or 2BC2
X'0517'	Cannot load CEEPIPI
X'0518'	CEEPIPI isub failed
X'0519'	CEEPIPI call failed
X'0520'	CEEPIPI delete failed
X'0521'	ICONV open failed
X'0522'	ICONV conv failed
X'0523'	ICONV close failed
X'0524'	Dubthread failed
X'0525'	Dubprocess failed
X'0526'	Logic error during PCL conversion
X'0527'	Logic error during line data conversion

SNA Sense Codes

When an error occurs on an input request, NetSpool returns a negative response or, in the case of a BIND request, NetSpool may return an UNBIND request. The negative response and the UNBIND request both include a sense code. These sense codes fall into two categories:

- General-use sense codes, which are described in *z/OS Communications Server: IP and SNA Codes*. Also, refer to the NetSpool SCS appendix in *z/OS Infoprint Server User's Guide* for information about SCS data stream errors that result in SNA sense codes.
- Implementation-specific sense codes, which are described in Table 4 on page 156 and in Table 5 on page 156.

Table 4. SNA Sense Codes for Function Management Data (FMD). NetSpool sends these sense codes on the response to an FMD (normal print data) request.

Sense Code	Meaning
X'08120000'	Request not executable. The attempt to obtain storage with a GETMAIN macro failed.
X'081C0002'	Request not executable. An internal logic error was detected in a NetSpool printer LU.
X'081C0102'	Request not executable. The attempt to allocate an output data set on the JES spool failed.
X'081C0103'	Request not executable. An error was detected in the printer definition.
X'081C0106'	Request not executable. The attempt to close a data set failed.
X'081C0203'	Request not executable. An unexpected return code was returned by a NetSpool module.
X'081C0220'	Request not executable. An error was detected in the page-format information for this LU. Correct the Printer Inventory printer definition for this LU.
X'081C0301'	Request not executable. The attempt to load exit APIPPTD1 or APIUBF3 failed.
X'081C0302'	Request not executable. The attempt to load exit APIPPTD2 failed.
X'081C0303'	Request not executable. The attempt to load exit APIPPTD1 or APIUBF3 failed, because of an abend in the exit.
X'081C0304'	Request not executable. The attempt to load exit APIPPTD2 failed, because of an abend in the exit.
X'081C0305'	Request not executable. The attempt to load exit APIUGEX failed.
X'081C0306'	Request not executable. The attempt to load exit APIUGEX failed due to an abend in the exit.

Table 5. SNA Sense Codes for BIND. NetSpool sends these sense codes on a BIND response or an UNBIND request when NetSpool rejects a BIND.

Sense Code	Meaning
X'081C0190'	Request not executable. An error was detected in the end-of-file (EOF) rules information for this printer LU. Correct the Printer Inventory printer definition for this LU.
X'081C0192'	An installation-written exit, either APIPPTD1 or APIPPTD2, requested that the session be terminated.

Chapter 5. Printer Inventory Manager Return Codes and Reason Codes

This chapter lists the return codes and reason codes issued by the Printer Inventory Manager to the other Infoprint Server components. These codes can help you determine why another component could not interface properly with the Printer Inventory Manager.

Where applicable, possible solutions are suggested. If no response is given, contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.

Table 6. Printer Inventory Manager Return Codes and Reason Codes

Return Code		
Decimal	**Hexadecimal**	**Meaning**
4	X'4'	The requested object was not found in the Printer Inventory.
8	X'8'	The inventory client has incorrectly coded parameters.
12	X'C'	An error occurred at the Printer Inventory Manager while processing the request. The system log will contain a message indicating the reason for failure.
16	X'10'	An API error occurred. The following reason codes are defined.

	Reason Code		
	Decimal	**Hexadecimal**	**Meaning**
	4	X'4'	Connection token is not valid.
	8	X'8'	Printer Inventory Manager is not active.
	12	X'C'	Client side storage was unavailable. It may help to increase the region size for the inventory client.
	16	X'10'	The query token is not valid.
	20	X'14'	Data that were not valid were supplied to the Printer Inventory Manager.
	24	X'18'	The request type was not valid. The most likely cause is running different maintenance levels between the client and the Printer Inventory Manager.
	28	X'1C'	An abend occurred during extract.
	32	X'20'	Multiple asynchronous fetches were issued.
	36	X'24'	A service was requested that is not allowed.
	40	X'28'	The service call was interrupted.

Table 6. Printer Inventory Manager Return Codes and Reason Codes (continued)

Return Code			
Decimal	**Hexadecimal**		**Meaning**
16	X'10'	**Reason Code**	
		Decimal / **Hexadecimal**	**Meaning**
		44 — X'2C'	A mismatched parameter list was coded.
		48 — X'30'	The client is not authorized to perform the specified action.
		52 — X'34'	Server-side storage is not available. It might be helpful to increase the amount of storage available to the Printer Inventory Manager.
		134610948 — X'08060004'	The Printer Inventory could not be found. You may be running on a system where Infoprint Server is not installed.
		nnnnnnnn — X'0x06yyyy'	The Printer Inventory could not be loaded. You may be running on a system where Infoprint Server is not installed. The high-order halfword of this reason code is the abend code from LOAD. The low-order halfword is the reason code for the abend.

Part 2. Diagnosis

Chapter 6. Understanding the Infoprint Server Diagnostic Process

When you encounter problems with Infoprint Server, it can help to perform certain steps before calling your IBM Service Representative. A first step is to determine which component of Infoprint Server is the source of the problem. For help narrowing the source of the problem, see "Determining Which Component to Troubleshoot" on page 163. Also see "Diagnosis Roadmap" on page 164 for a table matching functions to their components.

Sometimes the source of the problem is missing or incorrect parameters in one or more printer definitions in the Printer Inventory. To narrow the source of a printer definition error, see "Detecting Printer Definition Errors" on page 166.

Also, you can troubleshoot Infoprint Server by considering certain problems that have been encountered and fixed by others before you. See "Troubleshooting Infoprint Server" on page 167 for information about previously encountered situations.

Your IBM Service Representative will provide further assistance.

Determining Which Component to Troubleshoot

The components that make up Infoprint Server work together and separately to process and print data.

When data sets are not processed as expected (for example, output does not format as expected, or separator pages do not print as expected, or printer definitions cannot be accessed), it might not always be clear which components of the Infoprint Server are involved. Finding the source of the problem usually requires figuring out which component of the Infoprint Server to address. If you can isolate the correct component, you can collect more easily the messages, traces, and dumps that will enable your IBM Service Representative to address your problem.

This section can help you do some preliminary diagnosis work by helping you identify on which Infoprint Server component or components you should concentrate your efforts.

Error Message Prefix

If an error message is issued, the message prefix identifies which component issued the message.

ANF   Identifies a message issued by the IP PrintWay component. See "Message Format" on page 3 for more information about the IP PrintWay messages format.

AOP   Identifies a message issued by Infoprint Server. See "Message Format" on page 61 for more information about the Infoprint Server messages format.

AOX   Identifies a message issued by Infoprint Server Transforms, AFP to PCL, AFP to PDF, or AFP to PostScript transform component. See "Message Format" on page 61 for more information about the Infoprint Server Transforms messages format.

API Identifies a message issued by the NetSpool component. See "Message Format" on page 135 for more information about the NetSpool messages format.

SNA Sense Code

If an SNA sense code is issued at the system operator console, NetSpool might be involved. Usually a NetSpool message is issued along with the sense code. For more information about SNA sense codes, see "SNA Sense Codes" on page 155.

Printer Inventory Manager Return Code and Reason Code

Some messages issued by NetSpool, Print Interface, and IP PrintWay will be followed by Printer Inventory Manager return and reason codes. The message text and codes will describe a problem in the interface between the component and the Printer Inventory. For more information about Printer Inventory Manager return and reason codes, see Chapter 5, "Printer Inventory Manager Return Codes and Reason Codes" on page 157.

Application Issuing the Print Job

The system administrator might need to determine which application sent the print job to the JES spool:

- If the job was sent by a VTAM application such as CICS® or IMS™, then perform NetSpool diagnosis.
- If the job was sent by the local z/OS system, by a Windows application, or by a remote client using any of the following TCP/IP printing protocols, then perform Print Interface diagnosis.
  - Line printer requester (LPR) to line printer daemon (LPD)
  - Internet Printing Protocol (IPP)
  - Server Message Block (SMB) protocol, supported by Windows

Problem Detected on JES Spool

To determine if the problem is in NetSpool or Print Interface (as opposed to IP PrintWay), examine the print job on the JES spool. If you detect problems with the print job while it is still on the JES spool, then the problem probably is in NetSpool or Print Interface. Such an examination can isolate a number of NetSpool problems such as incorrect formatting or incorrect allocation parameters.

You can also identify which component issued the data set by looking at the name of the SYSOUT data set. The name of the NetSpool startup procedure is in the jobname, and the primary LU name is appended at the end of the SYSOUT data set name. Similarly, the name of the Print Interface startup procedure appears as the first qualifier of the data set name. The filename appears in the data set name, as well, which is useful when printing from remote systems through Print Interface with the LPR to LPD protocol (aoplpd) or with the Internet Printing Protocol (aopippd). However, when printing with z/OS UNIX shell commands, the jobname is the user ID.

Diagnosis Roadmap

When you encounter a problem with Infoprint Server, your service representative in the IBM Support Center might request that you trace one or more components to provide additional information to help diagnose the difficulty.

There are several ways to trace Infoprint Server. Depending on which component or components you want to trace, you may need to follow one or more of the procedures described in the chapters that follow. Different Infoprint Server components use different trace facilities:

- IP PrintWay trace facility
- NetSpool trace facility
- ISPF panel internal logic trace facility
- Infoprint Server Transforms, AFP tranforms trace facility
- Trace facility for the other Infoprint Server components:
  - Infoprint Server Windows client
  - Print Interface
  - Transform Manager
  - Simple Network Management Protocol (SNMP) subagent
  - Printer Inventory Manager

This chapter can help you determine which diagnosis procedures you need to perform, based on which function or component is causing a problem.

Table 7 lists the functions provided by Infoprint Server, the Infoprint Server components that you want to trace, and the sections in this publication that describe the required tasks.

Table 7. Infoprint Server Functions and Corresponding Infoprint Server Components

Function	Components	See Page:
Build a Printer Inventory of printer definitions and components.	Printer Inventory Manager	207, 213
Print from remote systems with one of the following TCP/IP protocols: • LPR to LPD • Internet Printing Protocol (IPP) • Server Message Block (SMB) Print from local system with z/OS UNIX shell commands or with the AOPPRINT JCL procedure.	Printer Inventory Manager Print Interface	207, 213
Print from VTAM applications such as CICS and IMS.	Printer Inventory Manager NetSpool	207, 213 199
Transform PCL, PostScript, PDF, or SAP data to AFP format	Printer Inventory Manager Print Interface Infoprint Server Transforms Transform Manager	207, 213
Transform AFP data to PCL, PostScript, or PDF format.	Printer Inventory Manager Print Interface Infoprint Server Transforms Transform Manager	207, 213 209
Print to printers in a TCP/IP network using one of the following TCP/IP protocols: • LPR to LPD • Direct sockets printing. • Internet Printing Protocol (IPP) Print to VTAM-controlled printers.	Printer Inventory Manager IP PrintWay	207, 213 183
Send print output to e-mail destinations.		

Table 7. Infoprint Server Functions and Corresponding Infoprint Server Components (continued)

Function	Components	See Page:
View printer characteristics and status of PSF printers that do not have internal SNMP agents.	Printer Inventory Manager SNMP subagent	207, 213
Print documents to a z/OS printer from a Windows system with the Infoprint Port Monitor.	Infoprint Port Monitor Printer Inventory Manager Print Interface	207, 213
Store system configuration information in the Printer Inventory for PSF for OS/390.	Printer Inventory Manager	207, 213

Detecting Printer Definition Errors

The components of Infoprint Server use the printer definitions in the Printer Inventory to format and direct print data sets into output.

You can identify and narrow your diagnosis of printer definitions several ways, depending on the failing component or on the interface you choose to use.

Identifying Which Printer Definition Is Involved in VTAM Applications

For print jobs sent by VTAM applications (using NetSpool), you can determine which printer definition is involved through the LU names identified in messages and other output.

The primary LU (PLU), which is the application's LU name, appears in messages and in the SYSOUT data set. The secondary LU (SLU), which is the printer's LU name, appears in messages and in the printer definition. Both the PLU and the SLU also appear in the VTAM definitions.

The printer name in the printer definition being used by NetSpool also can appear in error messages.

To check which Printer Inventory NetSpool is using, see the INV= parameter on the NetSpool startup procedure JCL for the instance of NetSpool involved in the problem.

For more information about the NetSpool startup procedure, refer to *z/OS Infoprint Server Customization*.

For more information about NetSpool LU names and Printer Inventory printer definitions, refer to *z/OS Infoprint Server Operation and Administration*.

Querying Printer Definitions

To query printer definitions (for example, to make sure a printer definition has the correct LU class identified or the correct NetSpool end-of-file information), use the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (PIDU) commands. For more information about Infoprint Manager interfaces, refer to *z/OS Infoprint Server Operation and Administration*.

IP PrintWay Message Log

The IP PrintWay message log contains relevant messages whenever IP PrintWay encounters printer definition problems.

Troubleshooting Infoprint Server

Customers have encountered certain common problems using Infoprint Server. These problems have straightforward fixes. If applicable, try these fixes before calling your IBM Service Representative.

Performance problems when printing to one printer from many printer definitions

Many customers have reported performance problems when printing output through many printer definitions when the **Restrict ports** field is selected in the printer definitions. Often, message ANFM1103I with errno 48 is found in the ANFMMSG data set. The problem occurs when the eleven well-known ports 721-731 are exhausted, and TCP/IP enforces a two-minute wait before a port is reused.

To fix the problem, the administrator should deselect the **Restrict ports** field in the printer definition so that ports 1024 and above can be used. By default, **Restrict ports** is not selected.

Printing to an HP LaserJet printer

When printing to an HP LaserJet printer, the administrator should specify 0D25 in the **Line termination** field in the printer definition to avoid incorrect output. If this value is not specified, the resulting output problems vary, but the most common is "stair stepping," where each line is indented further than the previous line.

Lines truncated for PostScript, PCL, and PDF data on the JES spool

If a user puts ASCII PostScript, PCL, or PDF data on the JES spool, some data might be lost if the IP PrintWay output class is coded BLNKTRNC=YES (JES2) or TRUNC=YES (JES3). With these codes, JES will truncate blanks (X'40') to save spool space. An ASCII @ character is actually X'40' and is used frequently in PostScript.

Set BLNKTRNC=NO in the JES2 OUTCLASS definition or TRUNC=NO in the JES3 SYSOUT or BUFFER definition. YES is the default for both fields.

Error issued for incorrect print queue name on HP printers with JetDirect cards.

Message ANFM1109I with error number 54 (econnreset) can be issued after a hardware error (such as output bin full). This problem occurs on Hewlett-Packard printers that have the JetDirect card when the **Print queue name** field in the printer definition is neither TEXT nor RAW. To correct the problem, change the print queue name to either TEXT or RAW.

Incorrect or partial output caused by incorrect printer information

A user might encounter incorrect output, partial or missing output, or partial output followed by a call for user intervention (printer becomes NOT READY). A common cause is a printer definition that specifies a port or port number when a print queue name is required. Specifying a port number implies direct sockets printing, which bypasses LPR/LPD processing, causing the described output errors.

Incorrect or partial output using the AFP to PCL, AFP to PDF, or AFP to PostScript transform

A user might encounter incorrect or partial output if the print process has been interrupted during the generation of print output

or an error occurred during print generation that interrupted the transform. This only happens when you are using a shell script command to transform data, such as afp2pdf or pcl2afp, and the transform is interrupted.

Cannot print multiple copies

Some line printer daemons do not support multiple copies through the standard LPD convention. A work-around is available by using the following JCL to generate multiple copies on the JES spool but then route them to the same printer:

```
//PWAYJOB4 JOB
//STEP1    EXEC PGM=USERA
//OUTDS1   OUTPUT CLASS=E,FORMS=WIDE,DEST=DEPT001
//DD1      DD SYSOUT=(,),OUTPUT=(*.OUTDS1,*.OUTDS1)
```

The number of JCL refer-backs (*.OUTDS1) is directly related to the number of SYSOUT data sets that get created.

Wrong font parameter passes to an AIX® machine (JES3)

In JES3, if you use the Remote PSF LPR option to pass a JCL CHARS parameter to an AIX machine as an **-ochars** parameter, the wrong font name might pass through to AIX. To fix the problem, add U to the WS parameter of the JES3 DEVICE IO statement for that particular printer FSA.

Data set on JES spool never closes or closes after the wrong page

If you specify an incorrect end-of-file rule for a NetSpool job, the data set on the JES spool might never close or might close after the wrong page. Check the end-of-file rule for the printer definition associated with this printer LU, and verify that the rule is suitable for your application. For more information, refer to *z/OS Infoprint Server Operation and Administration*.

Error messages BPXF024I and EDC5112I received when starting Infoprint Server daemons

If you start Infoprint Server daemons using the **/etc/rc** facility, you can receive the following error messages:

```
BPXF024I (BPXOINIT aoplpd: socket(AF_INET,SOCK_STREAM,0) failed in
TCPSocket::TCPSocket (int&,int,int) at ./src/tcpsock.cpp 83:
EDC5112I Resource temporarily unavailable. errno2=0x74b30296
```

This error occurs because UNIX System Services runs commands in the **/etc/rc** file early in the IPL and TCP/IP might not be completely active before the Infoprint Server daemons start. To correct this problem, you can use the **setstack** command, which you can download from the Web at

```
http://www.ibm.com/servers/eserver/zseries/zos/unix/
```

under the section "Tools and Toys", to ensure that TCP/IP is initialized before the **aopstart** command runs. Refer to *z/OS Infoprint Server Operation and Administration* for an example of how to specify the **setstack** command in **/etc/rc**.

lp command successfully spooled but unexpected output occurs

If you run the **lp** command in a UNIX System Services shell and the file is spooled successfully but the expected output is not generated, one of the following might have happened:

- You might be running the wrong **lp** command. The Infoprint Server **lp** command is located in the **/usr/lpp/Printsrv/bin**

directory; however, the standard UNIX System Services **lp** command is located in the **/bin** directory. You can use the **whence** command to determine the path of the command. To correct this problem, place the **/usr/lpp/Printsrv/bin** directory *before* the **/bin** directory in your PATH environment variable.

- If you are transforming AFP data, additional error messages may have been issued before the **AOP007I** message. Examine the message page for error information.

Infoprint Server job identifiers do not display on JES spool

You must use SDSF or a similar product to display the job identifiers assigned by Infoprint Server to output data sets on the JES spool. JES Display commands list internal job identifiers instead of the job identifiers assigned by Infoprint Server.

Error message EDC5207S received when starting the IPP server daemon

If one or more of the JAVA run-time libraries used by the Infoprint Server IPP server daemon (**aopippd**) is not APF authorized when you start **aopippd**, you receive the following error messages:

```
Could not load dll
EDC5207S Load request for DLL load module unsuccessful
JVM Initialization Failed
```

To correct this problem, APF-authorize the JAVA run-time libraries as described in *z/OS Infoprint Server Customization*.

Note: When maintenance is applied to JAVA, APF authorization is lost; therefore, you must APF-authorize these libraries again after applying JAVA maintenance.

ISPF panel AOPIPP1 displays message 'NOT AN ADMINISTRATOR' and message AOPIM021

If you receive ISPF messages indicating that you are not an administrator when you attempt to use the Infoprint Server ISPF panels, your TSO user ID does not have the required RACF authority. Your TSO user ID must be a member of the AOPADMIN group, and the AOPADMIN group must have READ access to the AOPADMIN resource profile in the FACILITY class. To display the RACF groups to which your user ID belongs, issue the **id** command. Output from the **id** command is similar to:

```
uid=2142(myuserid) gid=256(OPIE) groups=4000(AOPADMIN),4(USER)
```

Note: If the **id** command displays only one group and the AOPADMIN group is not displayed, the SETROPTS parameter NOGRPLIST might be set. NOGRPLIST causes the **id** command to check only the first group to which your user ID belongs; other groups are not checked. Therefore, if your user belongs to multiple groups, and AOPADMIN is not the first one, then the AOPADMIN group is not displayed. A SETROPTS list display will show 'LIST OF GROUPS ACCESS CHECKING IS INACTIVE'. Issue SETROPTS GRPLIST so that the **id** command can check all groups to which your user ID belongs.

Error when printing text data from an AS/400 system

If a user prints a text document from an AS/400 system using a

workstation customization object of QSYS/QWPDEFAULT, Print Interface might not recognize the data format as text. One of the following errors occur:

- If **Other** is *not* selected in the **Data format** field of the printer definition, Print Interface rejects the job.
- If **Other** is selected, data does not print as expected.

This problem occurs because the host print transform and workstation customization object QSYS/QWPDEFAULT on the AS/400 system inserts an initial null byte into the print file before sending it to Infoprint Server. The null byte prevents Print Interface from recognizing the data format as text.

To correct this problem, you can use the following source to create a workstation customization object that does not insert an initial null byte. This source is the same as for the QSYS/QWPDEFAULT object, but with :INITPRT DATA='00'X. removed. For information about how to create a customization object, refer to *OS/400 Workstation Customization Programming V4R3*.

```
:WSCST DEVCLASS=TRANSFORM.
  :TRNSFRMTBL.
  :SPACE
    DATA ='20'X.
  :CARRTN
    DATA ='0D'X.
  :FORMFEED
    DATA ='0C'X.
  :LINEFEED
    DATA ='0A'X.
  :EWSCST.
```

NetSpool page-formatting values ignored

NetSpool uses page-formatting values, such as margins and line length, that are specified in the printer definition (in the Processing section under the heading **Conversion between SCS and Line**), *only* when NetSpool formats SCS data (for LU type 1 sessions) into line data. NetSpool does not use page-formatting values in the printer definition when it formats 3270 data (for LU type 0 and type 3 sessions) because NetSpool instead uses page-formatting information that is specified in the 3270 Write Control Characters (WCCs) in the 3270 data stream.

To change page-formatting values for 3270 data, the application programmer must change the WCCs generated by the VTAM application that creates the 3270 data.

Error messages: CSV003I REQUESTED MODULE AOXVTM NOT FOUND and CSV0281 ABEND 806–04

This message is received when an APPL ID is specified in the IP PrintWay FSS definition in the Printer Inventory, but the Coax Printer Support feature of Infoprint Server Transforms is not installed. The Coax Printer Support feature must be installed before the APPL ID is specified.

To correct this problem, remove the APPL ID from the **Applid** field in the FSS definition before you restart IP PrintWay. After you install the Coax Printer Support feature, modify the FSS definition to specify the **Applid** field, and restart the IP PrintWay FSS.

Chapter 7. Building a Keyword String

Often a problem you encounter with Infoprint Server is one that other users have reported and that has been fixed. Records of such problems and their fixes are stored in an online data base called the IBM Software Support Facility. To search this data base, you can construct a keyword string, consisting of a concise series of terms, each of which describes one aspect of the problem. By constructing an accurate keyword string, you can help make the search quick, easy, and reliable.

Preparing to Build the Keyword String

Before you build a keyword string, do the following:

1. Ensure that the problem is within Infoprint Server. If you find that the problem results from a user or configuration error, refer to one of the following books for the correct procedure:
   - *z/OS Infoprint Server Customization*
   - *z/OS Infoprint Server Operation and Administration*
   - *z/OS Infoprint Server User's Guide*

2. If Infoprint Server has been changed since you last used it, examine the changes. If you suspect that the problem is due to incompatibilities between your program and the changed Infoprint Server program, note the area in which the incompatibility seems to be.

3. Correct all the problems reported in messages describing incorrect user data or resources. Refer to *z/OS Infoprint Server Messages and Diagnosis*.

4. Use the applicable diagnostic aids, such as traces and dumps, that may help you isolate the component that contains the problem. For a description of the aids available for each component of Infoprint Server, see:
   - Chapter 8, "Using IP PrintWay Diagnostic Tools" on page 183
   - Chapter 9, "Using NetSpool Diagnostic Tools" on page 199
   - Chapter 10, "Using Printer Inventory Manager Diagnostic Tools" on page 207
   - Chapter 12, "Using General Infoprint Server Diagnostic Tools" on page 213

5. Note the sequence of events that led to the problem. This information may be useful in developing a keyword string and is needed if an authorized program analysis report (APAR) is required.

6. If you suspect a problem in the Infoprint Server program, see Figure 1 on page 173 for an explanation of the procedure for selecting keywords.

The Keywords

Each keyword in a keyword string is a word or abbreviation describing one aspect of an Infoprint Server program problem. The first keyword gives the name of the Infoprint Server component in which the problem is thought to have occurred. By searching the IBM software support data base with this keyword, you can find all the APARs written for that component of Infoprint Server. By adding other keywords to the keyword string, you reduce the number of matches and increase the chances of finding a solution to your specific problem.

A complete string of keywords contains one keyword of each of the following types:
- Component identification number
- Type of problem, with qualifiers
- Module or modifier

- Release and maintenance level

If one of these types does not seem to apply to your problem, you can go on to the next type. In general, however, do not start your search until you have a complete string of keywords.

Your search will be most successful if you:
- Use only the keywords presented and described in this publication.
- Spell the keywords exactly as they are spelled here.
- Follow the keyword procedures in the order shown.

Throughout these procedures, each keyword string is highlighted in **bold** type. Each section provides a partial keyword string describing what is known so far about the problem. For some keywords, you may need to add a specific piece of information, for example, by replacing the *x* of the MSG*x* keyword with the identifier of the message received. Continue to develop the keyword string until you are instructed to use it as a search argument.

The position of the keywords is not important; however, you do need to separate them with spaces.

The procedure for building and using a keyword string is diagrammed in Figure 1 on page 173. After reviewing this figure, see "Component Identification Number" on page 173 to begin building a keyword string.

```
                    ┌──────────┐
                    │  Start   │
                    └────┬─────┘
                    ┌────┴─────┐
                    │Component │
                    │   ID     │
                    └────┬─────┘
                       ◇──┴──◇
                      ◇ Type of ◇
                      ◇ Failure ◇
                       ◇─────◇
```
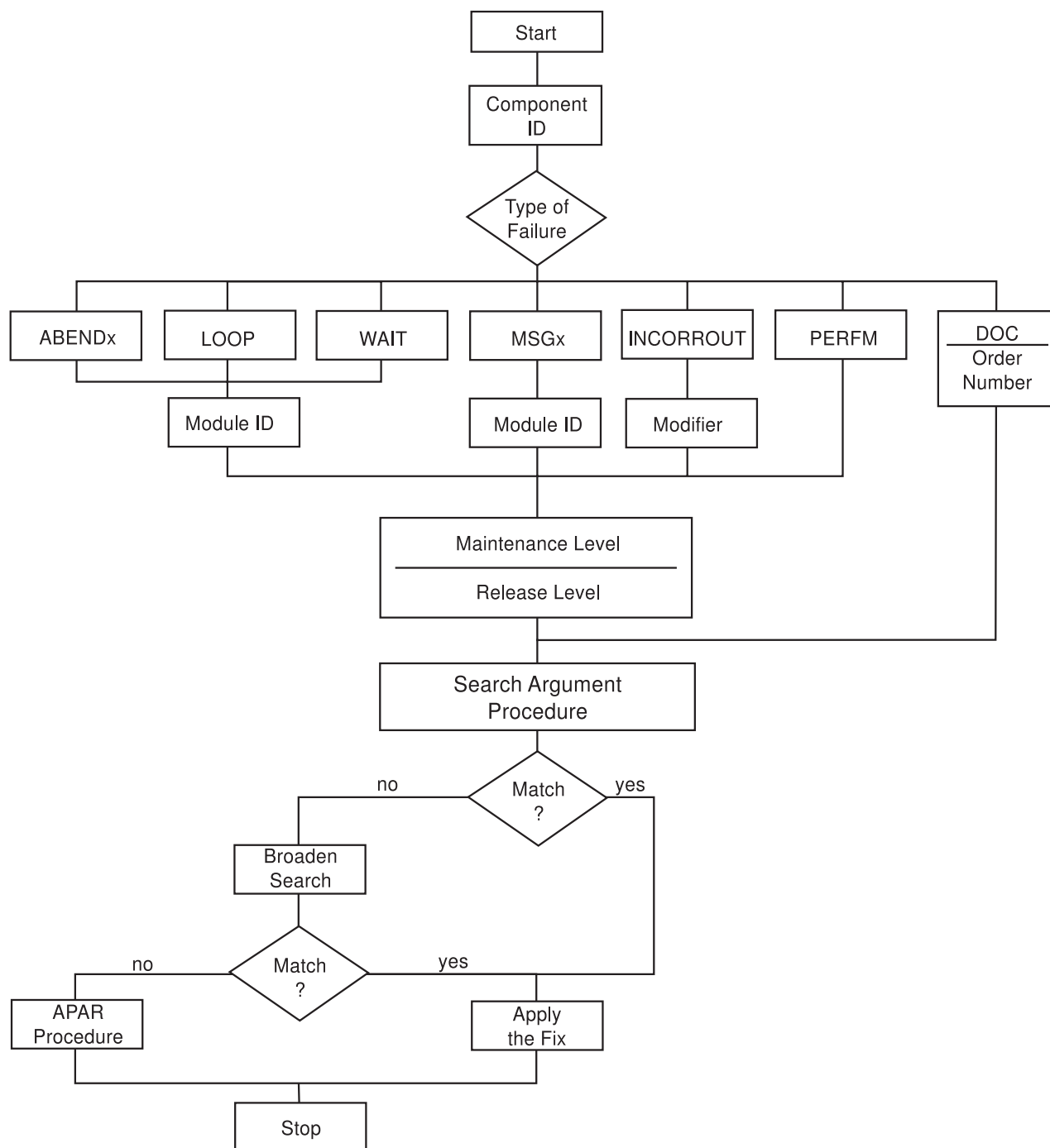
Figure 1. Building and Using a Keyword String

Component Identification Number

The component identification number is the first keyword in a keyword string. Whenever you suspect that the problem is in a component of Infoprint Server, use the identification number for the affected component of Infoprint Server for the as the first keyword.

Procedure

1. Begin the keyword string with the identification number for the Infoprint Server component or Infoprint Server Transforms feature. The following table lists the identification numbers:

Table 8. Component Identification Numbers

For this component or feature:	Use this component ID:
Infoprint Server: NetSpool component	569504002
Infoprint Server: IP PrintWay component	569504004
Infoprint Server: All other components	5647A01OP
Infoprint Server Transforms: Transforms to AFP and Kanji Print Support features	5697F5101
Infoprint Server Transforms: AFP to PCL, AFP to PostScript, and AFP to PDF features	5697F5102
Infoprint Server Transforms: Coax Printer Support feature	5697F5103

2. To indicate the type of problem that occurred, see Type-of-Failure Keyword.

Type-of-Failure Keyword

The type-of-failure keyword identifies the type of program problem. The seven possibilities are:

ABENDx   Abnormal end of Infoprint Server or one of its components. See "ABENDx" on page 174.

LOOP   Uncontrolled program looping. See "LOOP" on page 175.

WAIT   Unexpected program suspension. See "WAIT" on page 176.

MSGx   An error signaled by or associated with messages. See "MSGx" on page 176.

INCORROUT   Incorrect or missing output unrelated to a message. See "INCORROUT" on page 177.

PERFM   Performance degradation. Use this keyword only when no other keyword seems applicable. See "PERFM" on page 177.

DOC   Documentation problem. See "DOC" on page 177.

Select the keyword that best describes the problem. If you are not certain which of two keywords to use, use the one listed first in the list. The following pages explain the situations that govern which type-of-failure keyword to use.

ABENDx

Use the ABENDx keyword when the host system, an Infoprint Server component, or any program that services Infoprint Server ends abnormally. If the abnormal end was forced by the host system or by the operator because of a prolonged wait state or an endless loop, do not use this keyword. In these situations, see the descriptions of the LOOP and WAIT keywords.

Procedure

1. Add the ABEND code (in a dump, the last 3 hexadecimal numerals in the system completion code) to the keyword. For example, if the abend code is 0C4, use ABEND0C4.

2. The format of the keyword string might now be as follows:

   `569504004 ABEND0C4`

   where the first keyword is the component ID number, and the second is the type of error.
3. For help in determining which module failed, see "Module Keyword" on page 177.

LOOP

Use the LOOP keyword if part of Infoprint Server seems to go into an endless loop; for instance, if part of the output repeats endlessly. If you suspect a loop, ask the operator to request a dump by using the z/OS system command DUMP, as described in *z/OS MVS System Commands*; then cancel the Infoprint Server-started job. Whenever possible, the dump should contain the z/OS system trace table and the appropriate Infoprint Server component internal trace table.

Note: Before requesting the dump, start the generalized trace facility (GTF) with the SYS and JOBNAME options, to keep the trace overhead to a minimum. For details on how to obtain and print a GTF trace, refer to *z/OS MVS Diagnosis: Tools and Service Aids*.

For an endlessly repeated message, first use the MSG keyword to conduct the search. If no match is found, use the LOOP keyword. If an intentional loop is used to wait for a resource, use the WAIT keyword rather than the LOOP keyword.

Procedure

If a component of Infoprint Server suspends activity for no clear reason, Infoprint Server may be in either a loop or a wait state. An example of a loop is a page of output that repeats endlessly.

1. Run the job again and dump the address space for the failing component. Check the dump for a z/OS system internal trace table, an Infoprint Server component internal trace table, or both. If the trace tables are not contained in the dump, and you are unable to determine whether the problem is a wait or a loop, but you can recreate the problem, do the following:
   - Start the appropriate internal trace for the failing component. See "Tracing Infoprint Server" on page 213, "Starting a NetSpool Trace" on page 200, "Starting an IP PrintWay Trace" on page 185, and "Setting the ISPF Trace On and Off" on page 207 for information on starting internal traces for each component.
   - Redefine the trace table size to be as large as feasible.

   Run the job again and request a dump using the z/OS system DUMP command. Ensure that the SDATA operand of the command contains RGN (region). If the job is not in a loop, see "WAIT" on page 176.
2. The format of the keyword string might now be as follows:

   `569504004 LOOP`

   where the first keyword specifies the component ID, and the second specifies the type of problem.
3. To determine which module contains the problem, see "Module Keyword" on page 177.

WAIT

Use the WAIT keyword when the host system, a component of Infoprint Server, or a program that services Infoprint Server suspends activity, without issuing a message. If you suspect a wait condition, ask the operator to request a dump by using the z/OS system command DUMP, as described in *z/OS MVS System Commands*. Ensure that the SDATA operand of the command contains RGN. Then cancel the Infoprint Server-started task.

This dump should contain the z/OS system trace table and the internal trace table for the affected Infoprint Server component.

Inspect the dump to see whether the wait bit is on in the program status word (PSW).

Do not use this keyword if the wait occurs after an abnormal end, as the result of an unanswered message, or because of an endless loop in an Infoprint Server component; instead, use the ABEND or LOOP keywords.

Procedure

1. Add the WAIT keyword to the string.
2. The format of the keyword string might now be as follows:

    `569504004 WAIT`

3. To identify the module that contains the problem, see "Module Keyword" on page 177.

MSGx

Use the MSGx keyword when:
- A message was issued when it should not have been.
- A message was not issued when it should have been.
- A message contains invalid or missing data.
- The corrective action suggested in *z/OS Infoprint Server Messages and Diagnosis* does not correct the problem.

A set of seven or eight characters in one of the following forms, depending on the component in question, identifies each Infoprint Server message.
- "**ANFM***nnnt*" or "**ANFM***nnnnt*": IP PrintWay
- "**AOP***nnnnt*": Print Interface
- "**API***nnnnt*": NetSpool

The API, AOP or ANFM defines the component of Infoprint Server issuing the message. *nnn* or *nnnn* identifies the message serial number. *t* identifies the message type.

Note: The Printer Inventory Manager does not issue its own messages directly. Instead, the Printer Inventory Manager returns information to the component interfacing with it. That component in turn issues messages about the Printer Inventory Manager (such as missing data or lost connections).

Procedure

1. Replace the *x* in the MSGx keyword with the message identifier; for example, if the message identifier is ANFM700I, the MSG keyword is

    MSGANFM700I

2. The format of the keyword string might now be as follows:

```
569504004 MSGANFM700I
```

INCORROUT

Use the INCORROUT keyword when the output is not received or is not what you expected. Do not use this keyword for output that is repeated endlessly; in that case, use the LOOP keyword.

Procedure

1. Ensure that the output really is incorrect, rather than merely undesirable in appearance.
2. The format of the keyword string might now be as follows:

   ```
   569504004 INCORROUT
   ```

3. See "INCORROUT Modifier Keywords" on page 178, and select the correct keyword.

PERFM

Use the PERFM keyword when part of Infoprint Server performs below your expectations and the performance problem cannot be corrected by system tuning. Ensure that the application programs, the JCL, and the data set definitions have been thoroughly examined.

Procedure

1. The format of the keyword string might now be as follows:

   ```
   569504004 PERFM
   ```

DOC

Use the DOC keyword when a programming problem seems to have been caused because information in an Infoprint Server publication is vague, incorrect, or missing.

Procedure

1. After the DOC keyword, skip one space and add the order number of the publication. Do not use hyphens; that is, rather than G544-5690-00, type G544569000.
2. The format of the keyword string might now be as follows:

   ```
   569504004 DOC G544569000
   ```

3. If you find too many matches, add keywords unique to the documentation error you suspect. For example, add MSG*x* as a keyword if you are looking for a particular message because you suspect its contents are incorrect or unclear, or because it is not documented in *z/OS Infoprint Server Messages and Diagnosis*.

If the search is unsuccessful, replace the suffix numerals in the order number ("00" in the example above) with two asterisks, and search again. By including the asterisks, you are requesting a search for document errors in all the editions of a publication.

Module Keyword

The module keyword identifies the module related to the program problem.

Procedure

If you have a storage dump, use this procedure to find the name of the module associated with the program problem.

Note: This is not necessarily the module containing the problem.

1. In the storage dump, find the instruction address at which the abend occurred, the supervisor call instruction (SVC) for the WAIT was issued, or the LOOP occurred.

2. Back up from that instruction until you find a 6- to 8-character module ID (for example, APIPPPFT) followed by a module date. Include the module ID as part of the keyword string.

3. The format of the keyword string might now be as follows:

   `569504002 ABEND8C3 RC0501 APIPPPFT`

INCORROUT Modifier Keywords

This section describes the various keywords by which you can describe the incorrect output. You can use these keywords to describe missing or extra data, or data that you did not specify. The three levels of keywords to use are:

- The first level describes the document; for example, a document in line format.
- The second level describes what part of the document was incorrect; for example, an image.
- The third level describes how the part was incorrect; for example, the image was the wrong size.

Procedure

1. From Table 9, select one keyword to describe the document in which the incorrect output occurred.

Table 9. Modifier Keywords: Description of Pages

Keyword	Explanation
LINE	The document consisted of one or more line format pages, optionally including structured fields.
COMPOSED	The document consisted of one or more composed-text pages, for example, the output from DCF or OGL.
MIXED	The document consisted of both line-format and composed-text pages.

2. Select one or more keywords to describe the part that is incorrect. For example, if the incorrect output involves a page segment in an overlay, specify **OVERLAY SEGMENT**.

Table 10. Modifier Keywords: Incorrect Part

Keyword	Incorrect Part
CONTENT	You did not get the content of the document as you expected.
MISSING	A part or parts of the document are missing from the output.
MARGIN	The side, top, or bottom margin is not what you specified.
HEADER PAGE	You did not get the header page you expected, or you got a header page you didn't expect.

Table 10. Modifier Keywords: Incorrect Part (continued)

Keyword	Incorrect Part
TRAILER PAGE	You did not get the trailer page you expected, or you got a header page you didn't expect.

3. Select one or more of the keywords listed in Table 11 to describe what is wrong with the part just named.

Table 11. Modifier Keywords: Description of Incorrect Output

Keyword	Explanation
CONTENT	The content of the part was wrong.
DIRECTION	The rule direction was wrong.
EXTRA	An extra part was included in the output.
LENGTH	The rule length was wrong.
LINESPACE	The line spacing for a document, a page, or a text string was wrong.
MISSING	The part was missing from the output.
ORIENT	The orientation of the part was wrong.
POSITION	The position of the part was wrong.
REPEAT	The repetition of text or image cells was wrong.
SCALE	A scaling (double dot) error in an image occurred.
SIZE	The size of the part was wrong.
WEIGHT	The rule weight was wrong.

4. The format of the keyword string might now be as follows:

   `569504004 INCORROUT LINE CONTENT EXTRA`

   This example describes the case of extra, identical copies of one or more sheets of data.

   You can narrow the search by defining the incorrect output more precisely. The following are a few examples of INCORROUT strings:

   - In a composed-text page, the text in an included page segment was not in the expected orientation:

     `569504004 INCORROUT COMPOSED CONTENT TEXT ORIENT`

   - On a line data page, a requested header page did not print:

     `569504004 INCORROUT LINE HEADER PAGE MISSING`

Version, Release, and Maintenance Level Keywords

The keywords of this type give exact details about the version, release, and maintenance level of the Infoprint Server component your installation is using. The System Modification Program/Extended (SMP/E) consolidated software inventory data set (CSI) contains the ID of the latest program temporary fix (PTF) that has

been applied to your program. This ID, two letters and five numerals, gives the maintenance level of your program. For help in finding the PTF ID, refer to *SMP/E User's Guide*.

Procedure

1. Specify the Infoprint Server version, release, and modification level as a 3-digit code. For example, 280 represents Version 2 Release 8 Modification Level 0.
2. From the CSI listing, specify the ID, preceded by the prefix UY, UW, or UZ, of the latest PTF applied to your Infoprint Server program. Use the PTF number as a keyword *only* if you suspect that the PTF has caused the problem.
3. The format of the keyword string might now be as follows:

   ```
   569504002 WAIT APIPPPFT DIRECT 280
   ```

Search Argument Procedure

You now have the information needed for an effective search of the problem listings in the IBM Software Support Facility. If you do not have access to the IBM software support data base, consult your IBM Support Center. If you do have access to the IBM Software Support Facility, use a search tool such as Info Access to perform the following steps:

1. Search the IBM Software Support Facility, using the full keyword string you have developed.
2. From the list of matches, eliminate any APAR fixes or PTFs that have already been applied to your system.
3. Compare each remaining APAR or PTF closing description with the problem symptoms you have observed.
4. If you find a match and a fix, apply the fix described in the APAR record, and test the fix.
5. If you find a match but no fix, ask your IBM representative to notify you when a fix becomes available.
6. If you find no match, broaden the search by dropping keywords one at a time from the right side of the search argument, and repeat the search.
7. If you still cannot find a match, consult your IBM Support Center.

Preparing APARs

If the diagnostic procedures described here have been followed, but the keyword search has been unsuccessful, then and only then is an authorized program analysis report (APAR) prepared.

Procedure

1. Initiating an APAR

   If, after you have consulted your IBM Support Center for assistance, no fix for your problem is found, an IBM specialist will contact you to diagnose the problem in more detail. If the problem is a new one, the specialist will initiate an APAR. Be prepared to supply the following information:

   - Customer number
   - Release level
   - Current service level (the PTF list and list of APAR fixes applied)
   - Keyword string or strings used to search IBM Software Support Facility
   - Processing unit number: serial number, type, and model

2. Gathering information for an APAR

   You might be asked to supply any or all of the following information to describe the environment of the Infoprint Server problem:

   - A description of the problem
   - The SMP/E PTF identification number
   - As small a segment of the input statements and data as is sufficient to reproduce the problem
   - As small a segment of the output as is sufficient to illustrate the problem
   - Any traces or storage dumps that you have used to diagnose the problem
   - Terminal operator log (or the control statement listing from the library)
   - A full listing of the JCL used
   - Any printed output of data related to the job or data set in error, such as data set error messages
   - A copy of the host system log
   - For a WAIT problem (if possible), the program module that is waiting
   - For a LOOP problem, the location of the loop or at least a partial trace of the loop
   - For a DOC problem, the location of the error in the publication and a description of the problem it caused
   - For a PERFM problem, a description of the actual performance and the expected performance, and the source of the performance specification

3. Submitting the information

   When submitting information for an APAR to IBM, carefully pack and clearly identify any storage media that contain source programs, job stream data, data sets, or libraries.

   Note: If you submit confidential information to IBM, mark the information confidential. IBM considers all information submitted to be non-confidential unless otherwise indicated.

   Any storage media submitted must have the following information attached and visible:

   - The APAR number assigned by IBM
   - A list of the data sets on the storage media: application source program, JCL, data, and so on
   - A description of how the storage media were made, including the following:
     – The JCL needed to get the information from the tape
     – The exact JCL listing or the list of commands used
     – Labeling information used for the volume and its data sets
     – The recording mode and density
     – The attributes used for each data set

Each source submitted must have the following information attached and visible:

- The APAR number assigned by IBM
- The contents of the storage media: source program, job control statements, data, and so on

Each dump, and any other printed information, must show the APAR number.

Chapter 8. Using IP PrintWay Diagnostic Tools

This chapter describes IP PrintWay diagnostic tools that you can use to collect information about IP PrintWay software problems, including the Coax Printer Support feature of Infoprint Server Transforms. These tools can provide useful information to your service representative in the IBM Support Center. For information about z/OS diagnostic tools, refer to *z/OS MVS Diagnosis: Tools and Service Aids*.

This chapter describes how to:
- Submit APARs
- Obtain internal and external traces
- Obtain dumps
- Diagnose problems with the e-mail protocol

Submitting APARs

Report any difficulties using IP PrintWay to your IBM Support Center. If an APAR is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use one of the following component IDs:
- **569504004**: IP PrintWay
- **5697F5103**: Coax Printer Support feature of Infoprint Server Transforms

IP PrintWay Traces

IP PrintWay provides two types of traces:
- An internal wrap trace
- An external trace using the Generalized Trace Facility (GTF)

You can start either trace at initialization time or dynamically, that is, while IP PrintWay is running.

The service representative in the IBM Support Center may ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace; send it to your service representative.

IP PrintWay Internal Wrap Trace

The IP PrintWay internal trace contains hexadecimal entries for most module entries and exits. Trace data is maintained in internal storage, and it wraps when the trace storage area is full. Because the internal trace wraps, it reflects only the most recent history of IP PrintWay processing. IBM recommends that internal tracing always be turned on. See "Starting a Trace at IP PrintWay Initialization" on page 185 for more information.

You can request an internal trace of one or more IP PrintWay functional subsystem applications (FSAs). When you request any external trace you receive an internal trace automatically.

The internal trace is maintained in internal storage and cannot be directed to an external data set. A memory dump of IP PrintWay internal storage is required to see the trace. For more information on how to request a dump, see "Dumps" on page 195.

IP PrintWay maintains separate wrap traces for:
- The FSS. This trace has a fixed length of 1 K bytes (K equals 1024).
- Each FSA. This trace has a variable length from 4 K bytes to 3 996 K bytes. For information about specifying the size of the FSA internal trace table, see "Setting FSS Trace Options in the FSS Definition in the Printer Inventory" on page 185.
- The Transmission Queue Manager component.
- The Operator Interface component.

IP PrintWay External Traces

For an external trace, IP PrintWay uses the services of the z/OS Generalized Trace Facility (GTF). The trace produced by GTF can contain z/OS system-level information as well as information concerning IP PrintWay activity. For more information on GTF, refer to *z/OS MVS Diagnosis: Tools and Service Aids*.

You can start an external trace for the IP PrintWay FSS, as well as external traces for multiple FSAs. The number of FSAs that can be traced is limited to 16. Multiple external traces can be directed to a single GTF data set.

External Tracing Modes

You can request the following modes of external traces. In this way, you can limit the amount of trace data.
- Full trace

  A full trace is the larger and more complete external trace. All IP PrintWay subcomponents are traced. The Coax Printer Support feature of Infoprint Server Transforms, which drives VTAM-controlled printers, is also traced. All input records, TCP/IP commands, and VTAM commands are traced.
- Full, with no tracing of print records

  This trace provides the same information as the full trace; however, input records and TCP/IP commands are not traced. The Coax Printer Support feature of Infoprint Server Transforms, which drives VTAM-controlled printers, is also traced; tracing in the Coax Printer Support feature is the same as with the full trace.

You request the tracing mode when you start the trace, either at initialization or using the MVS MODIFY operator command.

Tracing Considerations

Consider the following impacts when selecting the tracing mode:
- Processor usage and throughput

  The FSA full external trace affects processor performance. Do not start a full external trace during peak processor usage. All other traces affect processor performance, but the impact is not as significant.
- Timing Considerations

  Activating any of the traces causes the timing relationships to change, possibly causing the problems to "disappear" when tracing is active. This is especially true for the full external trace. If a problem "disappears" when tracing, specify a different tracing mode, for example, a full trace with no tracing of print records.

Starting an IP PrintWay Trace

You can request internal and external tracing using one of the following methods:

- Specify a trace option in the IP PrintWay FSS and FSA definitions in the Printer Inventory:
  - You can specify a trace option in the FSS definition to trace the IP PrintWay FSS and all FSAs within the FSS.
  - You can specify a trace option in the FSA definition to trace one IP PrintWay FSA.

  After you specify a trace option in an FSS or FSA definition, you must start (or restart) the IP Printway FSS or FSA in order for the trace option to take effect. Tracing starts when the FSS or FSA is initialized.

- Issue the MVS MODIFY command:
  - You can start and stop tracing all FSAs within an IP PrintWay FSS. The FSS must be started, but the FSAs that you want to trace must not be running.
  - You can start and stop tracing one IP PrintWay FSA. The FSA you want to trace must be running.

Before you start any IP PrintWay external trace, you must start the Generalized Trace Facility (GTF).

Note: To trace the IP PrintWay FSS, including the queue manager function in the FSS, you must request a trace in the IP PrintWay FSS definition in the Printer Inventory, and you must not select the **Trace prompt** feature in the FSS definition.

Starting the Generalized Trace Facility

You must start a GTF trace prior to starting an IP PrintWay external trace. IP PrintWay writes trace output to the GTF trace data set.

When you start GTF, specify the following GTF parameters:

- The **USR=(FD1)** trace parameter

  Specify this parameter to obtain the trace entries produced by IP PrintWay.

- The **JOBNAME=**_proc_name_ parameter

  Specify this parameter to limit the trace entries to those produced by programs running in the IP PrintWay FSS address space. _proc_name_ is the name of the IP PrintWay startup procedure.

See Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221 for an example of how to start GTF.

Starting a Trace at IP PrintWay Initialization

You can specify a trace option in the IP PrintWay FSS definition and FSA definition to start tracing when the IP PrintWay FSS or an individual FSA is initialized.

Setting FSS Trace Options in the FSS Definition in the Printer Inventory

Tracing options specified in the IP PrintWay FSS definition take effect the next time the FSS is started. To set the trace options for an FSS, follow these steps:

1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Select **4 FSS/FSA/Pool** by typing 4 on the option line.
   b. Press Enter.

```
                    Infoprint Server: Printer Inventory Manager
Option ===> 4

Printer Definitions
    1 Add                Add a printer definition
    2 List               List printer definitions
    3 Select             Select printer definitions to list

Other Functions
    4 FSS/FSA/Pool       Manage other inventory definitions
    5 PrintWay Queue     View IP PrintWay transmission queue
    6 PrintWay Message   View IP PrintWay message log
    7 Configure          Change panel configuration
```

2. On the FSS, FSA, and Pool Management panel, enter **5** on the command line
   to **List FSSs**.

```
                    FSA, FSS, and Pool Management
Option ===> 5

FSA
    1 Add            Add an FSA
    2 List           List FSAs
    3 Select         Select FSAs to list

FSS
    4 Add            Add an FSS
    5 List           List FSSs
    6 Select         Select FSSs to list

Pool of Printer Definitions
    7 Add            Add a Pool
    8 List           List Pools
    9 Select         Select Pools to list
```

3. On the FSS List panel:

   a. To change the trace options for an FSS, type E for "Edit" in the space in
      front of the FSS.

   b. Press enter.

```
                              FSS List                      Row 1 to 6 of 6
Command ===>                                                Scroll ===> CSR

Actions:
  A-Add  B-Browse  C-Copy  D-Delete  E-Edit
A FSS Name Type Description
= ======== ==== ============================================================
E ASDF1    IPPW
_ ASFDA    IPPW
_ ASFDA    PSF
_ FSS1     IPPW PW one
_ FSS1     PSF  PSF one
_ OPIEFSS  PSF
_
****************************** Bottom of data ******************************
```

4.

   a. On the IP PrintWay FSS panel, enter the number that corresponds to the
      desired trace mode in the **Trace mode** field. The default mode is **none**. The
      recommended mode for normal processing is **Internal**.

   b. Select (with a /) or deselect the **Trace prompt** field.

      If you select the **Trace prompt** field, message ANFM020A is issued to the
      operator when the FSS starts. After the operator receives this message, the
      operator can enter the MVS MODIFY command to start tracing all FSAs

within the FSS. Tracing of the FSAs start before any data sets are processed. The FSS, however, including the queue manager function, is *not* traced.

If you do *not* select the **Trace prompt** field, the tracing requested in the **Trace mode** field starts as soon as the FSS starts. Therefore, if you select a trace in the **Trace mode** field, the FSS, including the queue manager function are traced.

  c. Enter a value for the **Trace table size**. Indicate the number, from 1 to 999, of 4 K pages of storage to allocate for each FSA trace table. For more information, see the help for the field.

  d. Exit the panel to save your changes. Enter `cancel` on the command line to exit without saving your changes.

```
Edit                          IP PrintWay FSS

FSS name. . . ASFDA
Description .                                              (extend)

  Trace mode. . . . . . 2   1. None  2. Internal  3. No printing  4. Full
      Trace prompt
    Trace table size .  ___
```

Note: Be sure to turn tracing off or return to Internal tracing mode when you are done. Tracing remains on during your next IP PrintWay session unless you turn tracing off. Do not trace IP PrintWay during peak processing time.

Setting FSA Trace Options in the FSA Definition in the Printer Inventory

All FSAs set to the default trace mode of **None** will initialize with the same tracing mode set in the IP PrintWay FSS definition. To change the trace mode for an individual FSA:

1. On the Infoprint Server: Printer Inventory Manager panel:

   a. Select **4 FSS/FSA/Pool** by typing 4 on the option line.

   b. Press Enter.

```
               Infoprint Server: Printer Inventory Manager
Option ===> 4

Printer Definitions
   1 Add              Add a printer definition
   2 List             List printer definitions
   3 Select           Select printer definitions to list

Other Functions
   4 FSS/FSA/Pool     Manage other inventory definitions
   5 PrintWay Queue   View IP PrintWay transmission queue
   6 PrintWay Message View IP PrintWay message log
   7 Configure        Change panel configuration
```

2. On the FSS, FSA, and Pool Management panel, enter **2** on the option line to **List FSAs**.

```
                        FSA, FSS, and Pool Management
Option ===> 2

FSA
   1 Add          Add an FSA
   2 List         List FSAs
   3 Select       Select FSAs to list

FSS
   4 Add          Add an FSS
   5 List         List FSSs
   6 Select       Select FSSs to list

Pool of Printer Definitions
   7 Add          Add a Pool
   8 List         List Pools
   9 Select       Select Pools to list
```

3. On the FSA List panel:

   a. To change the trace options for an FSA, type E for "Edit" in the space in front of the FSA.

   b. Press enter.

```
                              FSA List                     Row 1 to 7 of 7
Command ===> _____           Scroll ===> CSR

Actions:
  A-Add  B-Browse  C-Copy  D-Delete  E-Edit
A FSA Name Type   Description
= ======== ====== =============================================================
_ AAA1     IPPW
_ BBB      IPPW
_ FSA1     IPPW
E PRT630   IPPW*
_ PRT631   IPPW*
_ PRT632   PSFTCP op
_ PRT638   PSFTCP op4
****************************** Bottom of data *********************************
```

4. On the IP PrintWay FSA panel, select the **Trace mode**. The change will take effect the next time that FSA is started.

```
 Edit                          IP PrintWay FSA
 Command ==> _____

 FSA Name. . . PRT630
 Description . _____ (extend)

 Trace mode . . 3  1. None  2. Internal  3. No printing  4. Full
```

5. Exit the panel to save your changes. Enter CANCEL on the command line to exit without saving your changes.

Note: Return tracing to the default mode of **None** when you are done. Trace options remain set during your next IP PrintWay session unless you change them.

Starting a Trace Dynamically Using the MODIFY Operator Command

You can use the MVS MODIFY command to start FSA traces dynamically, that is, while IP PrintWay is running. You can start an external or internal trace for (1) one FSA or for (2) all FSAs within the FSS that have not yet been started:

- To start an external trace for one FSA, specify the name of the FSA on the MODIFY command. The FSA must be started; otherwise, the MODIFY command is rejected. Tracing begins immediately if the FSA is idle, or tracing begins when the next data set is processed.
- To start an external trace for all FSAs managed by the FSS that have *not yet been started*, do *not* specify any FSA name on the MODIFY command. Tracing begins for each FSA when the FSA is started.

Note: When you use the MODIFY command to start a trace dynamically, the trace does *not* trace FSS processing. To trace processing of the FSS, including IP PrintWay queue manager processing, you must specify the trace in the IP PrintWay FSS definition in the Printer Inventory and start tracing at initialization without using the trace prompt option. See "Starting a Trace at IP PrintWay Initialization" on page 185 for more information.

If you enter multiple MODIFY commands during IP PrintWay processing, each command overrides *all* parameters of the previous command if they both affect tracing of the same FSA(s). Thus, to change only one characteristic of a trace, re-specify values for the other parameters.

Figure 2 shows the syntax of the MODIFY or F command.

```
  ┌─ Syntax ──────────────────────────────────────────────────────────┐
  │  {MODIFY | F} fss_name,TRACEON                                      │
  │        [,                                                           │
  │           [ fsa_name]                                              │
  │           [,MODE=FULL | FULLNOPRT | INTERNAL]                       │
  │        ]                                                           │
  └────────────────────────────────────────────────────────────────────┘
```
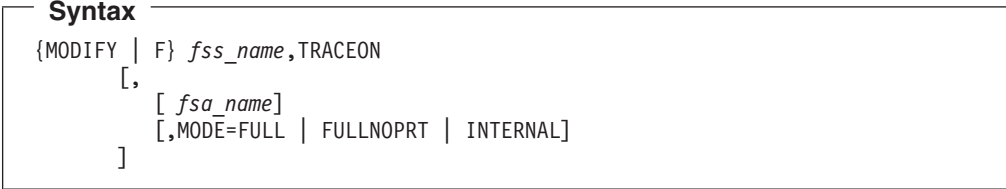
Figure 2. Syntax of the MODIFY Command for Starting Traces

Note: The *fsa_name* is a positional parameter. If you omit it, and you want to specify the MODE parameter, enter a comma after TRACEON to indicate the FSA name is omitted.

fss_name   Specifies the name of the FSS for which tracing is to be started. This is a required parameter.

                  fss_name parameter must match either:
- In a JES2 environment, the name in the JES FSS(*fss_name*) statement
- In a JES3 environment, the FSSNAME parameter of the JES FSSDEF statement

                  Refer to *z/OS Infoprint Server Customization* for information about JES statements.

TRACEON   Specifies that tracing is to begin. This is a required parameter.

fsa_name   Specifies the name of an FSA for which tracing is to begin. This is an optional parameter.

                  fsa_name must match either:
- In a JES2 environment, the JES PRT*nnnn* statement
- In a JES3 environment, the JNAME parameter of the JES DEVICE statement

Refer to *z/OS Infoprint Server Customization* for more information about JES statements.

If this parameter is omitted, tracing begins for all FSAs that have not yet started.

Example: This example shows how to start an internal trace for all FSAs that have not yet started.

```
MODIFY fss_name,TRACEON,,MODE=INTERNAL
```

MODE=FULL | FULLNOPRT | INTERNAL
The MODE parameter specifies the tracing mode, as follows:

FULL   Requests a full external and internal trace.

FULLNOPRT Requests a full external and internal trace, without tracing of record processing.

INTERNAL   Requests *only* internal tracing. INTERNAL is the default. Internal tracing also occurs whenever external tracing is turned on. Therefore, specify MODE=INTERNAL only when you want internal tracing *without* external tracing.

> **Note:** If you specify MODE=INTERNAL for a particular FSA, all external tracing stops. If you specify MODE=INTERNAL without an FSA name, IP PrintWay does no external tracing for FSAs that have not started yet, even if external tracing is requested in the startup procedure for an FSA.

Example: This example shows how to start an internal trace for the FSA named PRT001. Start FSA PRT001 before you enter this command.

```
MODIFY PRINTWAY,TRACEON,PRT001,MODE=INTERNAL
```

Stopping an IP PrintWay Trace

You can stop an IP PrintWay FSA trace by using one of the following methods:
- Issue the MVS MODIFY TRACEOFF operator command for the FSA.
- Select the **None** option in the **Trace mode** field of the IP PrintWay FSA definition in the Printer Inventory. You must restart the IP PrintWay FSA for the new trace option to take effect.

You can stop an IP PrintWay FSS trace by specifying the **None** option in the **Trace mode** field of the FSS definition in the Printer Inventory. You must restart IP PrintWay FSS for the new trace option to take effect.

Stopping a Trace Using the MODIFY Operator Command

Use the MVS MODIFY command to stop tracing an FSA without stopping IP PrintWay. You can also use the MVS MODIFY command to stop any future tracing of FSAs within the FSS.
- To stop an external trace for an FSA, specify the name of the FSA on the MODIFY command. Tracing of the FSA stops when the FSA is idle or before the next data set is processed.

- To stop future external trace for all FSAs that are managed by an IP PrintWay FSS and that have *not yet been started*, do *not* specify any FSA name on the MODIFY command.

Use the following syntax to stop a trace with the MODIFY or F command:

Syntax

```
{MODIFY | F} fss_name,TRACEOFF[,fsa_name]
```

---

fss_name   Specifies the name of the IP PrintWay FSS. This is a required parameter.

          fss_name must match either:
- In a JES2 environment, the name in the JES FSS(*fss_name*) statement
- In a JES3 environment, the FSSNAME parameter of the JES FSSDEF statement

          Refer to *z/OS Infoprint Server Customization* for information about the JES parameters.

TRACEOFF   Specifies that tracing is to be stopped. This is a required parameter.

fsa_name   Specifies the name of a specific FSA for which tracing is to be stopped. This is an optional parameter.

          fsa_name must match either:
- In a JES2 environment, the JES PRT*nnnn* statement
- In a JES3 environment, the JNAME parameter of the JES DEVICE statement

          Refer to *z/OS Infoprint Server Customization* for more information about the JES statements.

          If *fsa_name* is *not* specified, tracing is not performed for any FSAs that start *after* you issue the command, whether or not a trace option is specified in the FSS definition or the FSA definition in the Printer Inventory.

Examples:
- This example shows how to stop tracing the FSA named PRT001.

  ```
  MODIFY FSS1,TRACEOFF,PRT001
  ```
- This example shows how to stop tracing FSAs managed by FSS1 that have not yet started. Any tracing that has already started continues.

  ```
  MODIFY FSS1,TRACEOFF
  ```

Stopping a Trace in the IP PrintWay FSS and FSA Definitions in the Printer Inventory

You can stop tracing an IP PrintWay FSS and FSAs by editing the IP PrintWay FSS and FSA definitions in the Printer Inventory. Follow these steps:
1. If you want to stop tracing an FSA, stop that FSA.
2. If you want to stop tracing the FSS, stop the FSS.

3. If you want to stop tracing the FSS, select **None** in the **Trace mode** field in the FSS definition in the Printer Inventory. Because **None** is the default value, you do not need to create an FSS definition in the Printer Inventory simply to select this value.

4. If you want to stop tracing an FSA, select **None** in the **Trace mode** field in the FSA definition in the Printer Inventory. Because **None** is the default value, you do not need to create an FSA definition in the Printer Inventory simply to spelect this value.

5. Restart each FSA.

Viewing and Printing GTF Trace Data

You can view and print GTF trace data sets using the Interactive Problem Control System (IPCS). For more information about using IPCS, refer to *z/OS MVS IPCS User's Guide*.

When you use IPCS to view or print GTF trace data, specify USR event ID X'FD1'.

Examples of Tracing

The examples in this section show how to start and stop internal and external IP PrintWay tracing.

Starting an Internal Trace for an FSS and all FSAs at IP PrintWay Initialization

To start an IP PrintWay internal trace of the FSS and all FSAs within the FSS at IP PrintWay initialization, follow these steps. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

1. In the IP PrintWay FSS definition for FSS1 in the Printer Inventory, select the **Internal** option in the **Trace mode** field.

2. In the IP PrintWay FSA definitions for PRT001 and PRT002, select either **None** or **Internal** in the **Trace mode** field. Because **None** is the default value, you do not need to create FSA definitions simply to select this value.

3. Stop all IP PrintWay FSAs in the FSS so that IP PrintWay picks up the changes in the FSS definition.

4. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221.

5. Start the IP PrintWay FSAs, for example FSA PRT001 and FSA PRT002.

To stop tracing:

1. Enter the MODIFY operator command for the FSS and for each FSA:

```
MODIFY FSS1,TRACEOFF
MODIFY FSS1,TRACEOFF,PRT001
MODIFY FSS1,TRACEOFF,PRT002
```

2. Stop GTF by entering: `P GTF`

Starting an Internal Trace for one FSA Dynamically

To start an IP PrintWay internal trace for one IP PrintWay FSA dynamically while IP PrintWay is running, follow these steps. This example assumes that the FSA name is PRT001 and the FSS name is FSS1.

1. If an IP PrintWay FSS definition exists in the Printer Inventory, select **None** for the **Trace mode** field. This is the default value so you do not need to create an FSS definition simply to specify the simply to specify the **None** value.

2. If an IP PrintWay FSA definition exists for the FSA, select **None** for the **Trace mode** field. This is the default value so an FSA definition is not required.

3. Start the IP PrintWay FSA.

4. To start the trace, enter the following MODIFY command:

   ```
   MODIFY FSS1,TRACEON,PRT001,MODE=INTERNAL
   ```

   Internal tracing of the FSA begins when the FSA is idle or at the next data set boundary.

To stop tracing, enter the following MODIFY operator command:

```
MODIFY FSS1,TRACEOFF,PRT001
```

Starting an External and Internal Trace for an FSS and all FSAs at IP PrintWay Initialization

To start a full external trace of the FSS and all FSAs within the FSS at IP PrintWay initialization, follow these steps. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

1. In the IP PrintWay FSS definition for FSS1 in the Printer Inventory, select the **Full** option in the **Trace mode** field. Do *not* select the **Trace prompt** field.

2. In IP PrintWay FSA definitions for PRT001 and PRT002 in the Printer Inventory, select either the **None** or **Full** option in the **Trace mode** field. Because **None** is the default value, you do not need to create FSA definitions simply to specify this value.

3. Stop all IP PrintWay FSAs in the FSS so that IP PrintWay picks up the changes in the FSS definition.

4. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221.

5. Start the FSAs you want to trace. IP PrintWay starts tracing the FSS when it is initialized and starts tracing each FSA when the FSA is started.

To stop tracing:

1. Enter the MODIFY operator command for the FSS and for each FSA:

   ```
   MODIFY FSS1,TRACEOFF
   MODIFY FSS1,TRACEOFF,PRT001
   MODIFY FSS1,TRACEOFF,PRT002
   ```

2. Stop GTF by entering: `P GTF`

Starting an External and Internal Trace of all FSAs at IP PrintWay Initialization, with Prompting

To start an external trace of all FSAs in an FSS at IP PrintWay initialization and prompt the operator for tracing parameters, follow these steps. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

Note: This trace traces only FSA processing; it does *not* trace FSS processing. For an example of how to trace processing of the FSS, including IP PrintWay queue manager processing, see "Starting an External and Internal Trace for an FSS and all FSAs at IP PrintWay Initialization".

1. In the IP PrintWay FSS definition in the Printer Inventory, select the **Trace prompt** field. Select the **None** option in the **Trace mode** field. You can specify the type of trace you want with the MVS MODIFY command before the trace starts.

2. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221

3. In response to message ANFM020A, enter the following MODIFY command at the console if you want a full external trace. You cannot specify the name of an FSA in the MODIFY command because no FSAs have been started yet.

```
MODIFY FSS1,TRACEON,,MODE=FULL
```

Respond again to message ANFM020A with the following command:

```
MODIFY FSS1,U
```

Tracing begins for each FSA in the FSS when the FSA starts. If you want to start an FSA but not trace it, enter the MODIFY command to stop tracing that FSA after the FSA starts.

To stop tracing:

1. Enter the MVS MODIFY operator command for the FSS and again for each FSA that has been started. The first MODIFY command shown ensures that tracing does not start for any FSAs that are started after this time.

```
MODIFY FSS1,TRACEOFF
MODIFY FSS1,TRACEOFF,PRT001
MODIFY FSS1,TRACEOFF,PRT002
```

2. Stop GTF by entering: `P GTF`

Starting an External and Internal Trace of an FSA Dynamically

To start an external trace or an IP PrintWay FSA dynamically, follow these steps. This example assumes that the FSA name is PRT001 and the FSS name is FSS1.

1. If an IP PrintWay FSS definition exists in the Printer Inventory, select **None** in the **Trace mode** field. This is the default value, so you do not have to create an FSS definition simply to select the **None** value.

2. If an IP PrintWay FSA definition exists for the FSA in the Printer Inventory, select **None** in the **Trace mode** field. This is the default value, so you do not have to create an FSA definition simply to specify the **none** value.

3. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221.

4. Start FSA PRT001.

5. To start tracing FSA PRT001, enter the following MODIFY command:

```
MODIFY FSS1,TRACEON,PRT001,MODE=FULL
```

Tracing begins when the FSA is idle or at the next data set boundary.

To stop tracing:

1. Enter the following MODIFY operator command to stop tracing FSA PRT001:

```
MODIFY FSS1,TRACEOFF,PRT001
```

2. Stop GTF by entering: `P GTF`

Tracing IP PrintWay ISPF Panel Logic

When the IP PrintWay ISPF panels do not perform as expected, you may want to trace panel logic.

To trace IP PrintWay ISPF panel logic, perform the following steps:

1. On the Infoprint Server: Printer Inventory Manager panel:

a. Select **7 Configure** by typing 7 on the command line.

b. Press Enter.

```
                 Infoprint Server: Printer Inventory Manager
Option ===>_____

Printer Definitions
   1 Add                Add a printer definition
   2 List               List printer definitions
   3 Select             Select printer definitions to list

Other Functions
   4 FSS/FSA/Pool       Manage other inventory definitions
   5 PrintWay Queue     View IP PrintWay transmission queue
   6 PrintWay Message   View IP PrintWay message log
   7 Configure          Change panel configuration
```

2. On the Configuration panel:

a. Select (with a slash [/]) or deselect the **Trace Printer Inventory ISPF internals** field. This options turns on ISPF panel logic tracing for both Printer Inventory panels and IP PrintWay panels.

b. Specify the name of the IP PrintWay trace data set file in the field **Trace data set** under the heading IP PrintWay. The default name is *USERID*.ANFISPF.TRACE. To return to the default directory, clear the **ISPF trace directory** field.

c. To save the trace option and name of the directory, and exit the panel, press the END function key or enter `END` on the command line.

d. To save the trace options without closing the panel, press Enter.

e. To close the panel without saving the trace options, enter `CANCEL` on the command line.

```
                              Configuration
 Command ==>_____

 /  Confirm delete requests
 /  Trace Printer Inventory ISPF internals
 ISPF trace directory. . /var/Printsrv/trace_____

 Printer Inventory:
    Configuration file . /etc/Printsrv/aopd.conf_____
    NLS path . . . . . . /usr/lpp/Printsrv/%L/%N_____
    Language . . . . . . En_US_____
    Default printer. . . lp1_____

 IP PrintWay:
    Message log. . . . . ANF.MESSAGE_____
    Trace data set . . . USER1.ANFISPF.TRACE_____
```

Dumps

Dumps containing information useful to IP PrintWay diagnosis are produced under the following conditions:

- A standard z/OS abend dump is produced when IP PrintWay abends. IP PrintWay also issues a message containing an abend reason code.
- When the operator sets a SLIP trap or enters the DUMP command, an SVC dump is produced.

z/OS Abend Dump

z/OS automatically produces a standard z/OS abend dump during an abend if the IP PrintWay startup procedure contains a SYSUDUMP, SYSABEND, or SYSMDUMP DD statement. For help in reading a standard z/OS dump and using it to solve an IP PrintWay problem, refer to the diagnosis publications for z/OS.

SVC Dump

An SVC dump is recorded on SYS1.DUMPxx and can be caused by IP PrintWay abending or by the system operator issuing the DUMP command. You can use the IPCS program to format dumps and then view them at a display terminal or print them. Refer to *z/OS MVS IPCS User's Guide*.

Diagnosing Problems with the E-mail Protocol

When the e-mail protocol is selected in the printer definition, IP PrintWay uses the z/OS UNIX sendmail function to send the e-mails. Sendmail is a component of z/OS Communications Server. For information about sendmail, refer to the following publications and Web site in addition to the Infoprint Server publications:

- *z/OS Communications Server: IP Configuration Guide* describes how to customize sendmail and the other components of z/OS Communications Server that sendmail requires.
- The industry-accepted publication *Sendmail* published by O'Reilly & Associates, Inc. (ISBN 1–56592–222–0) describes the sendmail configuration file, how to set up sendmail aliases files, how to ensure security, and how to debug problems with your sendmail configuration.
- http://www.sendmail.org, a Web site maintained by the Sendmail Consortium as a resource for the freeware version of sendmail.

Sendmail is a very powerful program and can be complicated to set up. Therefore, if e-mails that IP PrintWay sends are not successfully received, verify that sendmail and other components of z/OS Communications Server are set up correctly before you call your IBM service representative.

Tips: Following are some tips for diagnosing problems:
- If sendmail cannot find an alias name, make sure:
  - The alias name is correctly specified in the **/etc/aliases** file.
  - You run the sendmail **newaliases** command after you make any changes to the **/etc/aliases** file:

    `/usr/sbin/newaliases`

  - Alias files are readable by everyone but writable only by the owner.
  - All directories in the path of an alias file are readable and executable by everyone but writable only by the owner.
- If an e-mail sent to a remote address is not received, make sure your installation has not set up firewalls that prevent mail from being sent.
- When sendmail cannot deliver an e-mail to a remote address, sendmail notifies the owner of the sendmail alias name. If the remote address is specified directly in the printer definition or if no alias owner is specified, sendmail notifies the user ID assigned to the IP PrintWay startup procedure. This user ID is AOPSTC if your installation assigned the user ID suggested in *z/OS Infoprint Server Customization* to the IP PrintWay startup procedure.

To receive mail, use the z/OS UNIX **mail** or **mailx** command. Refer to *z/OS UNIX System Services Command Reference* for information about these commands.

- If you do not receive messages from sendmail about undeliverable e-mails on a remote system, do the following:
  - Make sure your installation has not set up firewalls that prevent mail from being received by your system.
  - Make sure that sendmail has been started as a daemon. The following commands switch to an effective UID of 0 and start sendmail as a daemon that checks its mail queue every minute:

    ```
    su
    /usr/sbin/sendmail -bd -q1m
    ```

    To use the **su** command, you must be permitted to the BPX.SUPERUSER profile in the FACILITY class within RACF.
  - Ask your administrator to set suitable timeout values in the sendmail configuration file. The timeout values determine how long sendmail waits before it sends warning and failure messages about undeliverable e-mails.

- If an e-mail is not received, try running the **sendmail** command directly from the z/OS UNIX command line. Send a file to the same address list that is specified in the printer definition:

  ```
  /usr/sbin/sendmail address1,address2 <myfile
  ```

  The **sendmail** command is described in *z/OS Communications Server: IP User's Guide and Commands*.

Chapter 9. Using NetSpool Diagnostic Tools

This chapter describes NetSpool diagnostic tools that you can use to collect information about problems with the NetSpool component of Infoprint Server. These tools can provide useful information to your service representative in the IBM Support Center. This chapter describes:

- Submitting APARs
- NetSpool trace facility
- NetSpool dumps

Submitting APARs

Report any difficulties using NetSpool to your IBM Support Center. If an APAR is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use the NetSpool component ID: **569504002**

NetSpool Traces

NetSpool provides two types of traces:
- An internal wrap trace
- An external trace using the Generalized Trace Facility (GTF)

You can start either trace at initialization time or dynamically, while NetSpool is running.

The service representative in the IBM Support Center may ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace; send it to your service representative.

NetSpool Internal Wrap Trace

The NetSpool internal trace contains hexadecimal entries for most module entries and exits. Trace data is maintained in internal storage and wraps when the trace storage area is full. Because the internal trace wraps, it reflects only the most recent history of NetSpool processing.

You can request internal tracing of NetSpool's program control and the printer LUs processed by NetSpool. When you request a full trace, you automatically receive an internal trace. For each printer LU that is externally traced, a corresponding internal trace is provided.

The internal trace is maintained in internal storage and cannot be directed to an external data set. To see the trace, you must generate a memory dump of the NetSpool internal storage. For more information about how to request a dump, see "Dumps" on page 205.

NetSpool maintains separate wrap traces for:

- NetSpool's program control.

  This includes NetSpool's startup, operator command processing, starting and stopping printer LU sessions, VTAM interfacing, and Printer Inventory tasks.
- Each printer LU's processing of data.

This includes the SCS and 3270 commands, orders, data flow processed by NetSpool, and record output.

For each trace, you can select a length from 4 K to 3996 K.

NetSpool External Trace

For an external trace, NetSpool uses the services of GTF. The trace produced by the z/OS generalized trace facility (GTF) can contain z/OS system-level information as well as information concerning NetSpool activity. For more information about GTF, refer to *z/OS MVS Diagnosis: Tools and Service Aids*.

You can request an external trace of NetSpool's program control and one or more printer LUs.

Tracing Considerations

If you are concerned about processor usage, throughput, timing, or storage, you may want to consider the following:

*   Processor usage and throughput

    The full trace affects processor performance. Do not start a full trace during peak processor usage. All other traces affect processor performance, but the impact is not as significant.

*   Timing considerations

    Activating any of the traces causes the timing relationships to change. The problems may disappear when tracing is active, especially if a full trace has been activated. If a problem disappears when you are tracing, specify different trace options. For example, limit the tracing to one printer LU.

*   Storage considerations

    Tracing each printer LU requires a minimum additional storage of 6 K bytes above the 16 megabyte line. More storage is required if your trace options specify a PAGECOUNT that is greater than one. If you defined multiple printers in the Printer Inventory, you should consider tracing only the printer LUs that are needed to diagnose the problem.

Starting a NetSpool Trace

You can request internal and external tracing in two ways:

*   The NetSpool startup procedure

    By specifying parameters in the startup procedure, you can start tracing when NetSpool is started.

*   The MVS MODIFY command

    By using the MVS MODIFY operator command, you can start and stop a trace while NetSpool is running.

Note: Before you start any NetSpool external trace, you must start the generalized trace facility (GTF).

Starting the Generalized Trace Facility (GTF)

You must start a GTF trace before starting a NetSpool external trace. When you start an external trace at NetSpool initialization, start GTF before starting NetSpool. NetSpool writes trace output to the GTF trace data set.

When you start GTF, specify the following GTF parameters:

- The **USR=(FAC,FD2)** parameter

  Specify the USR parameter with two event identifiers (FAC and FD2) to obtain the following trace entries:
  - FAC causes NetSpool to trace the input data stream, end-of-file rules, data set allocation parameters, and so on. The NetSpool user or system programmer can use this trace information to diagnose problems related to the input data stream or to attributes defined in the Printer Inventory for a NetSpool printer LU.

    To obtain this trace information, also specify the LUNAME parameter either in the NetSpool trace options data set or on the MVS MODIFY command you use to start the NetSpool trace. If you know which LU is failing, specify the LU name in the LUNAME parameter to limit the amount of trace information and make the trace easier to read.
  - FD2 traces causes NetSpool to trace program control flow, control blocks, and so on. This trace information can help diagnose many types of problems.
- The **JOBNAME=**_proc_name_ parameter

  Specify this parameter to limit the trace entries to those produced by tasks running in the NetSpool address space. _proc_name_ is the name of the NetSpool startup procedure.

  See Appendix A, "Starting the Generalized Trace Facility (GTF)" on page 221 for an example of how to start GTF.

Starting a Trace at NetSpool Initialization

You can specify the TRACE=ON parameter on the EXEC statement and include a TRACEOPT DD statement in the NetSpool startup procedure to start tracing when the NetSpool is initialized. Refer to _z/OS Infoprint Server Customization_ for a description of the startup procedure.

To change a NetSpool startup procedure after NetSpool has already started, stop the NetSpool program. Change the statements in the startup procedure and start NetSpool. Refer to _z/OS Infoprint Server Customization_.

Trace Parameter on the EXEC Statement

Specify the TRACE=ON parameter with the PARM parameter on the EXEC statement. Refer to _z/OS Infoprint Server Customization_ for a description of the other parameters you can specify on the PARM parameter.

The following example shows the syntax of the PARM parameter when TRACE=ON is specified.

```
//APIPPAAA EXEC PGM=APIPPAAA,
          PARM=(LUCLASS=&LUCLASS,INV=&INV,TRACE=ON)
```

Trace Options Data Set Statement

Add a TRACEOPT DD statement to the NetSpool startup procedure and specify the name of the trace options data set. Specify DISP=SHR to allow more than one instance of NetSpool to use the data set. This statement is required if TRACE=ON is included in the EXEC statement.

The following example shows the syntax of the TRACEOPT DD statement.

```
//TRACEOPT DD DSN=dsname,DISP=SHR
```

Trace Options Data Set

The trace options data set can be either a member of a partitioned data set (PDS) or a sequential data set with the following attributes:

- Record format (RECFM) of fixed block (FB)
- Logical record length (LRECL) of 80

Parameters in the Trace Options Data Set

The following trace options can be specified in the trace options data set. Specify at least one trace option.

TYPE=FULL | INTERNAL

Specifies the type of trace to start. INTERNAL is the default value if TYPE is not specified.

FULL Requests an external trace to GTF and a corresponding internal wrap trace for the program control and each printer LU specified for tracing.

INTERNAL

Requests an internal wrap trace for the program control and each printer LU specified for tracing.

LUNAME=ALL | (*lu-name1***[,***lu-name2***,...])**

Specifies the printer LUs to be traced. The NetSpool program control is also traced. If LUNAME is not specified, only NetSpool program control is traced.

ALL Requests tracing all NetSpool printer LUs defined in the Printer Inventory.

(*lu-name1***[,***lu-name2***,...])**

Requests tracing specific NetSpool printer LUs defined in the Printer Inventory.

Notes:

1. IBM recommends that you specify the LUNAME parameter so that additional information related to NetSpool printer LUs is traced.
2. If you know which NetSpool printer LU is failing, specify that LU name in this parameter so that the amount of trace information is limited and easier to read.
3. Tracing NetSpool printer LUs increases the above-the-16 M-line storage requirement for NetSpool. Therefore, trace only the printer LUs necessary for diagnosing the problem.

PAGECOUNT=*nnn*

Specifies the number of 4 K pages of storage to allocate for each internal trace table. NetSpool allocates storage for the trace tables above the 16-megabyte line. Values from 1 to 999 are valid. The default is 12 (48 K bytes) for tracing NetSpool program control and 12 for each printer LU traced if PAGECOUNT is not specified. This allocation occurs only if NetSpool tracing is active.

Use the following syntax to specify the trace options in the trace options data set as specified in the TRACEOPT DD statement.

For example, if you want to perform full tracing of printer LUs LUPRT101 and LUPRT102, and want the size of the internal trace storage to be 24 K for each printer LU and the NetSpool program control, specify the following in the trace options data set:

```
TYPE=FULL,LUNAME=(LUPRT101,LUPRT102),PAGECOUNT=6
```

When NetSpool tracing is active, you can display the tracing status of the program control and each printer LU by entering the following NetSpool command.

Starting and Stopping a Trace Dynamically Using NetSpool Operator Commands

You can enter a NetSpool operator command to start or stop NetSpool tracing after NetSpool has started. If tracing is already started, you can also start tracing additional printer LUs or selectively stop printer LUs that are being traced. Once a trace has started for NetSpool program control or for a printer LU, its trace options cannot be modified. If you need to change the trace options for a specific printer LU, you must stop the trace for that printer and start it again.

To start tracing, enter the MVS MODIFY command and options as follows:

TYPE=FULL | INTERNAL
> Specifies the type of trace to start. INTERNAL is the default value if TYPE is not specified.
>
> **FULL** Requests an external trace to GTF and a corresponding internal wrap trace for the program control and each printer LU specified for tracing.
>
> **INTERNAL**
> > Requests an internal wrap trace for the program control and each printer LU specified for tracing.

LUNAME=ALL | (lu-name1[,lu-name2,...])
> Specifies the printer LUs to be traced. The program control is also traced. If LUNAME is not specified, only NetSpool program control is traced.

ALL Requests tracing all NetSpool printer LUs defined in the Printer Inventory.

(*lu-name1*[,*lu-name2*,...])
Requests tracing specific NetSpool printer LUs defined in the Printer Inventory.

Notes:

1. IBM recommends that you specify the LUNAME parameter so that additional information related to NetSpool printer LUs is traced.

2. If you know which NetSpool printer LU is failing, specify that LU name in this parameter so that the amount of trace information is limited and easier to read.

3. Tracing NetSpool printer LUs increases the above-the-16 M-line storage requirement for NetSpool. Therefore, trace only the printer LUs necessary for diagnosing the problem.

PAGECOUNT=*nnn*
Specifies the number of 4 K pages of storage to allocate for each internal trace table. NetSpool allocates storage for the trace tables above the 16-megabyte line. Values from 1 to 999 are valid. The default is 12 (48 K bytes) for tracing NetSpool program control and 12 for each printer LU traced if PAGECOUNT is not specified. This allocation occurs only if NetSpool tracing is active.

To start NetSpool full tracing for the program control and LUPRT101 and LUPRT102, enter the MVS MODIFY command, as in the following example:

```
F jobname.identifier,TRACE ON,TYPE=FULL,LUNAME=(LUPRT101,LUPRT102),PAGECOUNT=4
```

To stop a NetSpool trace, enter the MVS MODIFY command as follows:

```
┌─ Syntax ─────────────────────────────────────────────────────────────┐
│  F jobname.identifier,TRACE OFF[,LUNAME=ALL | (lu-name1[,lu-name2...])]│
└───────────────────────────────────────────────────────────────────────┘
```

where:

LUNAME=ALL | (*lu-name1*[,*lu-name2*...])
Specifies the printer LUs for which tracing is to be stopped. If LUNAME is not specified, all NetSpool tracing is stopped.

ALL Requests tracing is to be stopped for all NetSpool printer LUs defined in the Printer Inventory. Tracing for program control continues.

(*lu-name1*[,*lu-name2*...])
Requests tracing is to be stopped for specific NetSpool printer LUs defined in the Printer Inventory.

To stop NetSpool full tracing for the program control and LUPRT101 and LUPRT102, enter the MVS MODIFY command, as in the following example:

```
F jobname.identifier,TRACE OFF,LUNAME=LUPRT101,LUPRT102
```

When NetSpool tracing is active, you can display the tracing status of the program control and each printer LU by entering the MVS MODIFY command as follows:

```
┌─ Syntax ──────────────────────────────────────────────────────────┐
│  F jobname.identifier,DISPLAY TRACE                                │
│                                                                    │
└────────────────────────────────────────────────────────────────────┘
```

For example, to display the tracing status of the program control and printer
LUPRT101, enter:

```
F jobname.identifier,DISPLAY LUPRT101
```

Viewing and Printing GTF Trace Data

You can view and print GTF trace data sets using the Interactive Problem Control
System (IPCS). For more information about how to use IPCS, refer to *z/OS MVS
IPCS User's Guide*.

When you use IPCS to view or print GTF trace data, specify these NetSpool USR
event IDs: X'FAC' and X'FD2'.

Dumps

Dumps containing information useful to NetSpool diagnosis are produced under the
following conditions:
- A standard z/OS SVC dump is produced when NetSpool abends.
- When the operator sets a SLIP trap or enters the DUMP command, NetSpool
  produces an SVC dump.

An SVC dump is recorded on SYS1.DUMPxx and can be caused by NetSpool
abending or by the system operator issuing the DUMP command. You can use the
IPCS program to format dumps and then view them at a display terminal or print
them. Refer to *z/OS MVS IPCS User's Guide*.

Chapter 10. Using Printer Inventory Manager Diagnostic Tools

This chapter describes the Printer Inventory Manager diagnostic tools, which you can use to provide information on problems with the Printer Inventory and the Printer Inventory Manager ISPF panels to your service representative in the IBM Support Center.

This chapter describes:
- Submitting APARs
- ISPF trace facility
- Dumps

Submitting APARs

Report any difficulties using the Printer Inventory Manager ISPF panels to your IBM Support Center. If an APAR is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use the component ID that identifies Printer Inventory Manager (and other Infoprint Server components): **5647A01OP**

ISPF Trace

Printer Inventory Manager can trace the processing within Printer Inventory Manager panel modules during an interactive ISPF session. You can turn tracing on and off from an ISPF panel. Tracing is usually used only for short periods of time to diagnose problems and collect information to forward to your service representative at the IBM Support Center.

Printer Inventory Manager writes the ISPF trace to a separate hierarchical flat file (HFS) file for each ISPF session. If you turn tracing on and off during the same ISPF session, the Printer Inventory Manager appends trace records to the HFS file. The Printer Inventory Manager creates the trace file in directory **/var/Printsrv/trace**, unless you specify a different directory name when you start the trace. The name of the trace file that the Printer Inventory Manager creates is **userid.process_ID**, where:

userid   is the TSO user ID of the person who initiated the ISPF session.

process_ID   is the ID of the UNIX process that is started for the ISPF panel session.

Setting the ISPF Trace On and Off

You can set the trace option on or off at any time during an ISPF session. Follow these steps to set the trace option on or off:

1. On the Infoprint Server: Printer Inventory Manager panel:
    a. Select **7 Configure** by typing 7 on the command line.
    b. Press Enter.

```
                  Infoprint Server: Printer Inventory Manager
Option ===>_____

Printer Definitions
   1 Add                Add a printer definition
   2 List               List printer definitions
   3 Select             Select printer definitions to list

Other Functions
   4 FSS/FSA/Pool       Manage other inventory definitions
   5 PrintWay Queue     View IP PrintWay transmission queue
   6 PrintWay Message   View IP PrintWay message log
   7 Configure          Change panel configuration
```

2. On the Configuration panel:

   a. Select (with a slash [/]) or deselect the **Trace Printer Inventory ISPF internals** field.

   b. Specify the fully qualified name of an existing directory. To return to the default directory, clear the **ISPF trace directory** field.

   c. To save the trace option and name of the directory, and exit the panel, press the END function key or enter `END` on the command line.

   d. To save the trace options without closing the panel, press Enter.

   e. To close the panel without saving the trace options, enter `CANCEL` on the command line.

```
                          Configuration
Command ==>_____

/  Confirm delete requests
/  Trace Printer Inventory ISPF internals
ISPF trace directory. . /var/Printsrv/trace_____

Printer Inventory:
   Configuration file . /etc/Printsrv/aopd.conf_____
   NLS path . . . . . . /usr/lpp/Printsrv/%L/%N_____
   Language . . . . . . En_US_____
   Default printer. . . lp1_____

IP PrintWay:
   Message log. . . . . ANF.MESSAGE_____
   Trace data set . . . USER1.ANFISPF.TRACE_____
```

Note: Be sure to turn tracing off when you are done. Tracing remains on during your next Infoprint Server ISPF session unless you turn tracing off.

Dumps

You can use the **dump** command of the Printer Inventory Definition Utility (PIDU) to dump all objects in the Printer Inventory. For information on using the PIDU program, refer to *z/OS Infoprint Server Operation and Administration*. The format of the PIDU **dump** command is:

pidu -c 'dump *filename***; '**

where:

filename   is the name of the output file.

Chapter 11. Using Infoprint Server Transforms Diagnostic Tools

This chapter describes the diagnostic facilities provided by the Infoprint Server Transforms product.

Note: For information about the diagnostic facilities provided by the Coax Printer Support feature of Infoprint Server Transforms, see Chapter 8, "Using IP PrintWay Diagnostic Tools" on page 183.

Submitting APARs

Report any difficulties using Infoprint Server Transforms to your IBM Support Center. If an authorized program analysis report (APAR) is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use one of the following component IDs

- **5697F5101**: PCL to AFP, PDF to AFP, PostScript to AFP, and SAP to AFP transforms; Kanji Print Support feature
- **5697F5102**: AFP to PCL, AFP to PDF, and AFP to PostScript transforms

Using Infoprint Server Transforms Error Messages

If problems are encountered during program operation, the transforms produce error messages. These error messages might print on a separate message page with the output, might be saved in the transform **stderr** file, or might print on the user or system console, depending on the severity and nature of the error, according to the following guidelines:

- **Print formatting errors**: These error messages describe print formatting or job related errors. The transforms, except for the SAP to AFP transform, write these messages in the output file usually on a page following the transformed output.
- **Transform errors**: These errors indicate problems with the transforms or with transform configuration, so they are directed to the system administrator. The transforms, except for the SAP to AFP transform, write these messages to the transform's **stderr** file.

The SAP to AFP transform writes its error messages to the **stdout** file. If the job was submitted with the **lp** or **sap2afp** command, **stdout** output usually appears on the user's console, unless the user redirected the **stdout** file. If the job was submitted with the AOPPRINT JCL procedure or the AOPBATCH utility program, **stdout** output is sent to the file specified in the JCL to receive standard output. If the job was submitted using another method, for example, with the SAP R/3 GUI, the transform directs error messages to the system console.

Finding the Transform stderr File

You can find a transform's **stderr** file in the directory named *base-directory*/**xfd**, where *base-directory* is determined by the value of the **base-directory** attribute in the Infoprint Server configuration file, **aopd.conf**. The default base directory is named **/var/Printsrv**.

The **stderr** file-naming convention is:

transform[*_class*]*.#.stderr*

where:

transform   Specifies the transform name, which is defined in the Infoprint Server Transform Manager configuration file, **aopxfd.conf**, for example, **afp2pcl**.

class   Specifies the transform class, which is specified in the **-c** option when the transform is invoked. Transform classes are defined in the Infoprint Server Transform Manager configuration file, **aopxfd.conf**.

Is a unique number assigned by the transform. This number is incremented each time a new transform is started.

The AFP to PCL, AFP to PDF, and AFP to PostScript transforms let you redirect **stderr** output with the **-F** transform option. See "Trace Options for the AFP to PCL, AFP to PDF, and AFP to PostScript Transforms" on page 211 for information about the **-F** option.

Note: To read the transform's **stderr** file, you must have READ access to the AOPADMIN resource profile in the RACF FACILITY class and must be a member of the AOPADMIN group. Refer to *z/OS Infoprint Server Customization* for information about how to establish security for Infoprint Server administrators.

Tracing Infoprint Server Transforms

This section describes the trace facilities provided by Infoprint Server Transforms for the following transforms:

- AFP to PCL, AFP to PDF, and AFP to PostScript transform
- SAP to AFP transform

No tracing facilities are provided for the PCL to AFP, PDF to AFP, and PostScript to AFP transforms.

The service representative in the IBM Support Center might ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace; simply send it to your service representative.

You can request a trace in three ways:

- In a printer definition: You can request a trace in the **Filter** field of a printer definition in the Printer Inventory.

  When you request a trace for the AFP to PCL, AFP to PDF, or AFP to PostScript transform, run the job that you want to trace and then either remove the trace options or specify a different trace filename in the **-F** option before you run the next job. This is because the trace file that you specify in the **-F** option must not already exist. See "Trace Options for the AFP to PCL, AFP to PDF, and AFP to PostScript Transforms" on page 211 for more information about the **-F** option.

- In the **filter-options** job attribute: You can request a trace in the **filter-options** job attribute specified with the **lp** command or with any other job-submission method that lets you specify Infoprint Server job attributes. For example, you can specify the Only**filter-options** job attribute when you submit a job using the Infoprint Port Monitor.

- On the transform command: You can request a trace on the **afp2pcl**, **afp2pdf**, **afp2ps**, and **sap2afp** command.

See "Examples" on page 212 for examples of all three methods.

Trace Options for the AFP to PCL, AFP to PDF, and AFP to PostScript Transforms

The following trace options let you request a trace of the **afp2pcl**, **afp2pdf**, and **afp2ps** transforms and specify where you want the trace output written:

-F *filename*

Specifies the name of the file where the transform writes trace and **stderr** output. If you specify this option without the **-T** option, only **stderr** output is directed to this file. The file name can contain up to 120 characters and can include an extension.

Note: The file you specify must *not* already exist; if it exists, the transform fails.

The trace file is created in a directory with the following format:

`base-directory/xfd/transform[_class].n.d`

where:

base-directory
Specifies the Infoprint Server base directory, which is determined by the value of the **base-directory** attribute in the Infoprint Server configuration file, **aopd.conf**. The default base directory is **/var/Printsrv**.

transform
Specifies the transform name, which is defined in the Infoprint Server Transform Manager configuration file, **aopxfd.conf**.

class
Specifies the transform class, which is specified in the **-c** option when the transform is invoked. Transform classes are defined in the Infoprint Server Transform Manager configuration file, **aopxfd.conf**.

#
Is a unique number assigned by the transform. This number is incremented each time a new transform is started.

Note: To read the trace file, you must have READ access to the AOPADMIN resource profile in the RACF FACILITY class and must be a member of the AOPADMIN group. Refer to *z/OS Infoprint Server Customization* for information about how to establish security for Infoprint Server administrators.

Example: -F myfile.trace

Default: The trace is appended to the transformed output; no separate trace file is produced. **stderr** output is directed to the **stderr** file.

-T *options*

Specifies the type of trace you want. To request more than one type of trace, specify multiple options in parentheses, or specify the **-T** option multiple times. Allowed values are:

all	All trace options (generates a lot of output)
allocate	File and memory allocations
flow	Program flow information
io	Input output trace

trans   Internal transform

   Example: -T (allocate io)

   Default: No tracing is performed.

Trace Option for the SAP to AFP Transform

The following trace option lets you request a trace of the **sap2afp** transform:

-t   Requests that the transform produce a trace in file **sap2afp.trc** in the transform's current working directory. If the trace file does not exist, it is created. Trace output is appended to any existing trace output.

   If the file was submitted with the **lp** or **sap2afp** command, the transform's current working directory is the current working directory of the user who issued the command. If the print request was submitted using another method, for example, with the SAP R/3 GUI, the current working directory is the Infoprint Server base directory. The default base directory is **/var/Printsrv**; however, the default base directory can be changed in the **base-directory** attribute in the Infoprint Server configuration file, **aopd.conf**.

Examples

1. The following ISPF screen shows how to request a trace of the **sap2afp** transform in the Processing section of a printer definition. Only a portion of the ISPF screen is shown. The trace is written to file **/var/Printsrv/sap2afp.trc**.

```
                             Processing
   ⋮

   Supported data formats and associated filters:
   Data format:  Filter:

   _  Line data   _____  (extend)
   _  MO:DCA-P    _____  (extend)
   _  PostScript  _____  (extend)
   _  Text        _____  (extend)
   _  PCL         _____  (extend)
   _  PDF         _____  (extend)
   /  SAP         sap2afp -t_____  (extend)
   _  Other       _____  (extend)

   _  Resubmit for filtering

   ⋮
```

2. This example shows how to request a transform trace on the **lp** command. In this example, if printer definition `myprinter` requests the AFP to PCL transform (**afp2pcl**) and also specifies transform class **us** (in transform option **-c us**), then the transform writes its trace and **stderr** output to file **/var/Printsrv/xfd/afp2pcl_us.0.d/myfile.trace**.

   ```
   lp -d myprinter -o "filter-options='-T io -F myfile.trace'" myfile.afp
   ```

3. This example shows how to request a transform trace on a transform command. In this example, the AFP to PostScript transform writes a full trace and **stderr** output for file **myfile.afp** to file **/var/Printsrv/xfd/afp2ps.0.d/myfile.trace**.

   ```
   afp2ps -d myprinter -T all -F myfile.trace myfile.afp
   ```

Chapter 12. Using General Infoprint Server Diagnostic Tools

This chapter describes the general Infoprint Server trace facility, which you can use to provide information to your service representative in the IBM Support Center.

This trace facility can be used to diagnose problems with:

- Infoprint Server **lp**, **lpstat**, and **cancel** commands
- Printer Inventory Manager
- Print Interface, including the Print Interface LPD and IPP Server
- Transform Manager
- Simple Network Management Protocol (SNMP) subagent

Submitting APARs

Report any difficulties using Infoprint Server to your IBM Support Center. If an authorized program analysis report (APAR) is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use the appropriate component ID. For all components of Infoprint Server other than NetSpool and IP PrintWay, the component ID is **5647A01OP**.

Note: NetSpool and IP PrintWay each have their own component ID. Every other component of Infoprint Server uses the component ID listed above.

Tracing Infoprint Server

The service representative in the IBM Support Center might ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace; send it to your service representative.

The following two z/OS UNIX System Services environment variables control tracing:

AOPTRACEON
> Set this variable to any value to turn tracing on. Unset this variable to turn tracing off.
>
> **Note:** Setting this variable to any value, even to OFF, turns tracing on.
>
> **Example:** `AOPTRACEON=1` or `AOPTRACEON=ON`

AOPTRACEDIR
> Specify the directory where trace files are created. This environment variable is *optional*. If this variable is not defined, trace files are created in default directory **/var/Printsrv/trace/**.
>
> **Example:** `AOPTRACEDIR=/mydirectory/trace`

Tips:
- Tracing slows performance considerably. Turn tracing on for only as long as necessary to capture the error.

- If you want all trace files to be created in the same directory, either do not specify the AOPTRACEDIR variable (all trace files are created in the default directory), or specify the *same* directory in both the **aopstart** EXEC and any other process you are tracing.
- To find out if the AOPTRACEON variable is set in the z/OS UNIX shell, use the z/OS UNIX **export** and **grep** commands to look at the value of the AOPTRACEON variable:

```
export | grep AOPTRACEON
```

Results:
  - If AOPTRACEON is *not* set, the **export** and **grep** commands do not return any output.
  - If AOPTRACEON is set, the **export** and **grep** commands return the AOPTRACEON value or AOPTRACEON=*""*.

Tracing Infoprint Server Daemons

Turning trace on: To trace processing within one of the Infoprint Server daemons, for example, the Print Interface LPD:

1. Stop the Infoprint Server daemon that you want to trace using one of the following methods:
   - Enter the MVS START command to run the AOPSTOP JCL procedure to stop the daemon:

   ```
   START AOPSTOP OPTIONS='-d lpd'
   ```
   - Enter the z/OS UNIX **aopstop** command to stop the daemon:

   ```
   aopstop -d lpd
   ```
2. Specify the AOPTRACEON environment variable and then restart the daemon, using one of the following methods:
   - Specify AOPTRACEON in the AOPSTART JCL procedure. Create an MVS data set, named for example TRACE.ENV, with the following DCB attributes:
     - RECFM=VB
     - LRECL=255

   In the data set, specify the AOPTRACEON variable. Start in the first column, and do not code any blank characters in the string or at the end of the line:

   ```
   AOPTRACEON=1
   ```

   Specify the TRACE.ENV data set in the AOPSTART procedure:

   ```
   ///STDENV DD DSN=TRACE.ENV,DISP=SHR
   ```

   Then, enter the MVS START command to run the AOPSTART procedure:

   ```
   START AOPSTART
   ```
   - Set the AOPTRACEON environment variable on the z/OS UNIX command line before entering the **aopstart** command. Use the **export** command to set AOPTRACEON, or specify AOPTRACEON on the same command line as the **aopstart** command. When you specify AOPTRACEON on the same command line, the AOPTRACEON variable is set only for this instance of the **aopstart** command.

   ```
   export AOPTRACEON=1
   aopstart
   ```

   Tip: To set AOPTRACEON only for one command, set the variable on the same line as the command:

   ```
   AOPTRACEON=1 aopstart
   ```

Refer to *z/OS Infoprint Server Customization* for information about how to edit the AOPSTART procedure.

Turn tracing off: To stop tracing one of the Infoprint Server daemons:

1. Stop the daemon being traced, for example the LPD, using one of the following methods:
   - Enter the MVS START command to run the AOPSTOP procedure to stop the daemon:

     ```
     START AOPSTOP OPTIONS='-d lpd'
     ```
   - Enter the z/OS UNIX **aopstop** command to stop the daemon:

     ```
     aopstop -d lpd
     ```
2. Unset the AOPTRACEON variable, and then restart the daemon. Use one of the following methods:
   - If you use the AOPSTART JCL procedure to restart the daemon:
     a. Comment out the STDENV DD statement in the AOPSTART procedure.
     b. Enter the MVS START command to run the AOPSTART procedure:

        ```
        START AOPSTART
        ```
   - If you use the z/OS UNIX **aopstart** command to restart the daemon
     a. Unset the AOPTRACEON variable. You need to unset AOPTRACEON only if it is set in the z/OS UNIX shell. The variable is set in the shell if you used the **export** command to set it.

        ```
        unset AOPTRACEON
        ```
     b. Restart the daemon:

        ```
        aopstart
        ```

Tracing the lp, lpstat, or cancel Commands

Turning trace on: To trace the **lp**, **lpstat**, or **cancel** command:

1. Set the AOPTRACEON variable:

   ```
   export AOPTRACEON=1
   ```
2. Enter the **lp** command:

   ```
   lp ...
   ```

Tip: To set AOPTRACEON only for one command, set the variable on the same line as the command:

```
AOPTRACEON=1 lp ...
```

Turning trace off: To stop tracing the **lp**, **lpstat**, or **cancel** command:

1. Unset the AOPTRACEON variable. You need to unset AOPTRACEON only if it is set in the z/OS UNIX shell. The variable is set in the shell if you used the **export** command to set it.

   ```
   unset AOPTRACEON
   ```
2. Reissue the command:

   ```
   lp ...
   ```

Tracing the SMB Support in DFS Server

Turning trace on: To trace the SMB support provided by the DFS server, add the AOPTRACEON=1 environment variable to the DFS environment variable file, named **envar**, for the DFSKERN daemon. To change the **envar** file, open **/opt/dfslocal/home/dfskern/envar**. For more information, refer to *Distributed File Server SMB Administration Guide and Reference*.

Turning trace off: To stop tracing the SMB support provided by the DFS server, comment out the AOPTRACEON=1 environment variable from the DFS environment variable file, named **envar**, for the DFSKERN daemon.

Tracing the AOPPRINT Procedure

Turning trace on: To trace the AOPPRINT procedure, specify the AOPTRACEON=1 environment variable in the STDENV DD statement in the procedure. You can specify AOPTRACEON in-stream. Start in the first column, and do not code any blanks in the string or at the end of the line.

```
//STDENV DD *
AOPTRACEON=1
```

Turning trace off: To stop tracing the AOPPRINT procedure, comment out the AOPTRACEON=1 environment variable in the STDENV DD statement in the procedure:

```
//STDENV DD *
*AOPTRACEON=1
```

If the STDENV DD statement points to a data set, comment out the STDENV DD statement in the procedure.

Changing the Trace Directory

To change the trace directory when you trace an Infoprint Server daemon, specify the AOPTRACEDIR environment variable in the **aopstart** EXEC before you restart the daemon. See the comments in the **aopstart** EXEC for more information. Also, refer to *z/OS Infoprint Server Customization* for information about how to edit the **aopstart** EXEC.

To change the trace directory when you trace another Infoprint Server process, such as a command or the SMB support, specify the AOPTRACEDIR environment variable together with the AOPTRACEON variable. For example, if you want to trace the **lp** command and direct trace files to /mydirectory/trace, enter the following z/OS UNIX commands:

```
export AOPTRACEDIR=/mydirectory/trace
export AOPTRACEON=1
lp ...
```

To return to using the default trace directory, **/var/Printsrv/trace/**, use the z/OS UNIX **unset** command:

```
unset AOPTRACEDIR
```

Finding the Trace File

The trace facility creates a separate trace file for each Infoprint Server process traced. The trace file will be named *userid.process_ID* where:

userid   Specifies the TSO user ID of the person who initiated the trace.

process_ID   Specifies the ID of the process created in z/OS UNIX to create the trace.

To determine where the trace file was created, read the following message, which appears on STDOUT when a component is started with tracing active:

```
Tracing to file: trace directory/userid.process_ID
```

Using IPP Server Diagnostic Information

The Print Interface IPP server writes diagnostic information to file **ipp.out** in the directory specified in the **base-directory** attribute in the Infoprint Server configuration file, **aopd.conf**. The base directory defaults to **/var/Printsrv**.

The IPP server always writes diagnostic information to the **ipp.out** file, whether or not the AOPTRACEON environment variable is set. If the AOPTRACEON variable is set, then the IPP server also writes trace information to the **/var/Printsrv/trace** directory.

Part 3. Appendixes

219

Appendix A. Starting the Generalized Trace Facility (GTF)

You must start a GTF trace before starting a NetSpool or IP PrintWay external trace. When you start an external trace at NetSpool or IP PrintWay initialization, start GTF before starting the program component. Both NetSpool and IP PrintWay write trace output to the GTF trace data set.

When you start GTF, specify the following GTF parameters:

USR=(*event_id***)**
> - For IP PrintWay tracing, specify `USR=(FD1)`
> - For NetSpool tracing, specify `USR=(FAC,FD2)`
>
> Specify this trace parameter to obtain the trace entries produced by IP PrintWay or NetSpool.

JOBNAME=*proc_name*
> Specify this parameter to limit the trace entries to those produced by tasks running in the IP PrintWay or NetSpool startup procedure. *proc_name* is the name of the startup procedure.

You must start GTF before starting an external IP PrintWay or NetSpool trace. To start GTF, follow these steps:

1. Enter:

    ```
    S GTF.identifier,devname,volserial,(TIME=YES)
    ```

    where:

identifier	Specifies the user name for this GTF session
devname	Specifies the device number or type of output device to contain the trace data set
volserial	Specifies the serial number of the magnetic tape or DASD volume to contain the trace data set
TIME=YES	Specifies that GTF is to time-stamp every record

    GTF responds: "xx AHL100A SPECIFY TRACE OPTIONS"

2. Enter:

    ```
    R xx,TRACE=USRP,JOBNAMEP
    ```

    The USRP parameter is optional. Specify it only if you want to limit the trace entries to those produced by a single component (NetSpool or IP PrintWay).

    GTF responds: "xx AHL101A SPECIFY TRACE EVENT KEYWORDS— USR=,JOBNAME="

3. For IP PrintWay tracing, enter:

    ```
    R xx,USR=(FD1),JOBNAME=(PRINTWAY)
    ```

    In the USR parameter, specify FD1 to limit the trace entries to those produced by IP PrintWay.

    In the JOBNAME parameter, specify the name of the IP PrintWay startup procedure.

For NetSpool tracing, enter:

```
R xx,USR=(FAC,FD2),JOBNAME=(NETSPOOL)
```

In the USR parameter, specify FAC and FD2 to limit the trace entries to those produced by NetSpool.

In the JOBNAME parameter, specify the name of the NetSpool startup procedure.

GTF responds: "xx AHL102A CONTINUE TRACE DEFINITIONS or REPLY END"

4. Enter:

```
R xx,END
```

GTF responds: "AHL103I Trace Options Selected – USR=(FD2),Jobname=(NETSPOOL)

or,

GTF responds: "AHL103I Trace Options Selected – USR=(FD1),Jobname=(PRINTWAY)

xx AHL125A RESPECIFY Trace Options or Enter U"

5. Enter:

```
R xx,U
```

GTF responds: "AHL031A GTF Initialization Complete"

6. After tracing is complete, to stop GTF, Enter:

```
P GTF.identifier
```

Appendix B. Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen-readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

Using Assistive Technologies

Assistive technology products, such as screen-readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.

Keyboard Navigation of the User Interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to *z/OS TSO/E Primer*, *z/OS TSO/E User's Guide*, and *z/OS ISPF User's Guide Volume I* for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

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Bibliography

This section lists publications that may be helpful to you as you configure and use Infoprint Server.

Infoprint Server

Title	Order Number
Infoprint Server Transforms Licensed Program Specifications	G544-5797
z/OS Infoprint Server Customization	S544-5744
z/OS Infoprint Server Introduction	S544-5742
z/OS Infoprint Server Messages and Diagnosis	G544-5747
z/OS Infoprint Server Migration	G544-5743
z/OS Infoprint Server Operation and Administration	S544-5745
z/OS Infoprint Server User's Guide	S544-5746
Infoprint Server for z/OS Implementation Redbook	SG24–6234

Print Services Facility™ for OS/390

Title	Order Number
AFP Conversion and Indexing Facility: User's Guide	S544-5285
PSF for OS/390 & z/OS: Customization	S544-5622
PSF for OS/390 & z/OS: Diagnosis	G544-5623
PSF for OS/390 & z/OS: Download for OS/390	S544-5624
PSF for OS/390 & z/OS: Introduction	G544-5625
PSF for OS/390 & z/OS: Messages and Codes	G544-5627
PSF for OS/390 & z/OS: User's Guide	S544-5630

Advanced Function Presentation (AFP)

Title	Order Number
IBM Printing Systems: Printer Information	S544-5750
IBM Printing Systems: Printer Summary	S544-5749
AFP: Programming Guide and Line Data Reference	S544-3884
IBM AFP Fonts: Font Summary for AFP Font Collection	S544-5633
IBM AFP Fonts: Font Summary for AFP Font Collection	S544-5633
IBM Data Stream and Object Arcitectures: Bar Code Object Content Architecture Reference	S544–3766
IBM Data Stream and Object Arcitectures: IOCA Reference	SC31–6805
IBM Page Printer Formatting Aid: User's Guide	S544-5284

Infoprint Manager for AIX and Windows

Title	Order Number
IBM Infoprint Color 130 Plus Installation Planning Guide	G544-5771
IBM Infoprint Manager: Reference	S544-5475
IBM Infoprint Manager for AIX: Administrator's Guide	S544-5595

z/OS Version 1 Release 2

Title	Order Number
z/OS C/C++ Programming Guide	SC09-4765
z/OS C/C++ Run-Time Library Reference	SA22-7821
z/OS Communications Server: IP and SNA Codes	SC31-8791
z/OS Communications Server: IP Application Programming Interface Guide	SC31-8788
z/OS Communications Server: IP Configuration Guide	SC31-8775
z/OS Communications Server: IP Configuration Reference	SC31-8776
z/OS Communications Server: IP Migration	GC31-8773
z/OS Communications Server: SNA Diagnosis Vol 1 Techniques and Procedures	LY43-0088
z/OS Communications Server: SNA Diagnosis Vol 2 FFST Dumps and the VIT	LY43-0089
z/OS Communications Server: SNA Messages	SC31-8790
z/OS Communications Server: SNA Network Implementation Guide	SC31-8777
z/OS Communications Server: SNA Operation	SC31-8779
z/OS Communications Server: SNA Programming	SC31-8829
z/OS Communications Server: SNA Resource Definition Reference	SC31-8778
z/OS Distributed File Service SMB Administration	SC24-5918
z/OS Information Roadmap	SA22-7500
z/OS ISPF Dialog Developer's Guide and Reference	SC34-4821
z/OS JES2 Commands	SA22-7526
z/OS JES2 Initialization and Tuning Guide	SA22-7532
z/OS JES2 Initialization and Tuning Reference	SA22-7533
z/OS JES3 Commands	SA22-7540
z/OS JES3 Initialization and Tuning Guide	SA22-7549
z/OS JES3 Initialization and Tuning Reference	SA22-7550
z/OS Language Environment Debugging Guide	GA22-7560
z/OS Language Environment Run-Time Messages	SA22-7566
z/OS Language Environment Programming Guide	SA22-7561
z/OS MVS Diagnosis: Tools and Service Aids	GA22-7589
z/OS MVS Initialization and Tuning Guide	SA22-7591
z/OS MVS Initialization and Tuning Reference	SA22-7592
z/OS MVS JCL Reference	SA22-7597
z/OS MVS Product Management	SA22-7603

Title	Order Number
z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN	SA22-7609
z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG	SA22-7610
z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU	SA22-7611
z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO	SA22-7612
z/OS and z/OS.e Planning for Installation	GA22-7504
z/OS Program Directory	GI10-0670
z/OS SDSF Operation and Customization	SA22-7670
z/OS Security Server RACF General User's Guide	SA22-7685
z/OS Security Server RACF Security Administrator's Guide	SA22-7683
z/OS Summary of Message Changes	SA22-7505
z/OS UNIX System Services Command Reference	SA22-7802
z/OS UNIX System Services Messages and Codes	SA22-7807
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CICS

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CICS Customization Guide	SC34-5706
CICS Diagnosis Reference	LY33-6097
CICS Resource Definition Guide	SC34-5722
CICS Supplied Transactions	SC34-5724

IMS/ESA® Version 6

Title	Order Number
IMS/ESA Administration Guide: System	SC26-8730
IMS/ESA Administration Guide: Transaction Manager	SC26-8731

3270 and SNA Data Streams

Title	Order Number
IBM 3270 Information Display System Data Stream Programmer's Reference	GA23–0059
IBM 3270 Information Display System 3274 Control Unit Description and Programmer's Reference	GA23–0061
IBM 3270 Information Display System Reference Summary	GX20–1878
IBM 3270 Kanji Data Streams	GA18–2980

Title	Order Number
IPDS and SCS Technical Reference	S544–5312
Systems Network Architecture: Sessions Between Logical Units	GC20–1868

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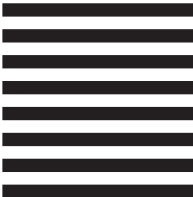Fold and Tape   **Please do not staple**   Fold and Tape

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